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May 9th 1830

# CULPEPER's ENGLISH PHYSICIAN; AND COMPLETE HERBAL.

TO WHICH ARE NOW FIRST ADDED

Upwards of One Hundred additional HERBS,

WITH A DISPLAY OF THEIR

MEDICINAL AND OCCULT PROPERTIES,

PHYSICALLY APPLIED TO

The CURE of all DISORDERS incident to MANKIND.

TO WHICH ARE ANNEXED,

RULES for Compounding MEDICINE according to the TRUE SYSTEM of NATURE:

FORMING A COMPLETE

## FAMILY DISPENSATORY,

And Natural SYSTEM of PHYSIC.

BEAUTIFIED AND ENRICHED WITH

ENGRAVINGS of upwards of Four Hundred and fifty different PLANTS,

And a SET of ANATOMICAL FIGURES.

ILLUSTRATED WITH NOTES AND OBSERVATIONS,

CRITICAL AND EXPLANATORY.

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By E. SIBLY, M. D. Fellow of the Harmonic Philoſophical Society at PARIS; and
Author of the Complete ILLUSTRATION of ASTROLOGY.

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HAPPY THE MAN, WHO, STUDYING NATURE'S LAWS,
THROUGH KNOWN EFFECTS CAN TRACE THE SECRET CAUSE. DRYDEN.

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*LONDON:*
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1789

# To THOMAS DUNCKERLY, Eſq.

## PROVINCIAL GRAND MASTER

### OF THE ANCIENT AND HONOURABLE FRATERNITY OF FREE AND ACCEPTED MASONS OF DORSET, ESSEX, GLOUCESTER, SOMERSET, BRISTOL, SOUTHAMPTON, AND THE ISLE OF WIGHT.

SIR,

PRESUMING on the well-known goodneſs of your Heart, and that liberality of Sentiment, which renders your Actions, like your Deſcent, NOBLE, permit me to ſolicit your protection to a Work, which, though of the firſt Importance in the Cauſe of Humanity, will acquire new Vigour under your Auſpices, and dawn forth with accumulated Luſtre under the Shield of your Arm; which, like that of the good Samaritan, is ever reached out to adminiſter Comfort and Relief to your afflicted Fellow-Creatures.

It has been a long-eſtabliſhed Maxim among civilized Societies, to ſubmit to their Preſident, whatever is thought conducive to the general Good. You are the illuſtrious Head of many reſpectable Lodges of free and accepted Maſons, whoſe Care it has been to cheriſh a Contemplation of the deep myſteries of Nature, from Time immemorial.

morial. And, though the Body of this invaluable Work is not of my Production, yet, ſhould the Notes and Illuſtrations, and the other Improvements now made to it, be thought worthy of your Approbation, or of the Notice of my maſonic Brethren, I truſt they will find in them an ample ſtore of Precepts, whereby the bleſſings of Health might be univerſally diſpenſed, and the happineſs of Mankind more permanently ſecured; to promote which is the leading Feature of maſonic Principles.

Should this important Object be obtained, and medical Knowledge be diffuſed through the Empire in its pure and priſtine State, diſrobed of its ambiguous Dreſs, and made the Friend of every Family---my Heart will rejoice, and my utmoſt Deſires be accompliſhed.

Wiſhing you internal and external Happineſs in the terrene Lodge here, and eternal Joy and Glory in the divine *Sanctum Sanctorum* above, permit me publicly to aſſure you how unfeignedly I am,

SIR,
Your moſt humble
and devoted Servant,

E. SIBLY.

*No. 1, Upper Titchfield-Street, Cavendiſh-ſquare, London,*
*In the Year of Maſonry* 5798.

# THE PREFACE.

DISEASE is undoubtedly the moſt fatal enemy of mankind. To prevent its approaches, or to overcome its attacks, is perhaps the moſt important concern of our lives; and an inquiſition that appears only attainable by the moſt natural and ſimple means. For this purpoſe Mr. Nicholas Culpeper's ENGLISH PHYSICIAN ſeems peculiarly well adapted; ſince it reſorts, for every mode of Cure, to that infallible ſource prepared by God and Nature, in the vegetable ſyſtem; whence flow ſpontaneouſly the genuine Virtues of Medicine, diffuſed univerſally over the face of the whole earth, *where nothing grows in vain!*

Indeed, had this ingenious and moſt invaluable Work no other recommendation than having paſſed through ſo many editions, yet would it ſufficiently juſtify my offering it once more to the notice and conſideration of an enlightened public. But, when we reflect on the diſcoveries ſince made in the botanical world—the great acquiſitions derived to the Work by the addition of upwards of one hundred newly-diſcovered aromatic and balſamic herbs—independent of the phyſical ſkill and philoſophical perception diſplayed by its Author, we ſhall find innumerable inſtances of its utility, and perceive in it a fund of information and medical acquirements, which promiſe the moſt extenſive benefits to ſociety, by forming a *Domeſtic Phyſician* in every Family.

It might perhaps have been replete with the happieſt conſequences to our beloved King under his late infirmity, and would unqueſtionably have tended more quickly to diſpel the painful apprehenſions of his afflicted people, had this great Maſter of human nature been contemporay with us. No man, I believe, but the *proſeſſionally* envious, will preſume to queſtion his medical abilities, or preſcribe limits to his phyſical knowledge, which eclipſed the practice of every phyſician of his day, and put to ſilence the whole tribe of empirics and quacks. I cannot give a higher proof of his profeſſional diſcernment, nor any thing more applicable to the anxious feelings of my reader, than by ſhewing how exactly he has pointed out the diſorder with which his Majeſty was lately afflicted, and the ſimples which are applicable to its ſeveral ſtages, ſo exact and critical, that, if he had been living, and appointed one of the conſulting phyſicians, he could not have marked the outline of it with more preciſion.

He diſtinguiſhes diſeaſes which produce prenzy into three different claſſes; the ſecond he terms *periphrenetio.* He deſcribes it thus: " It is preceded by a very ſharp fever, which will rage for a few days violently: when it ſubſides, the delirium takes place with fits of the fever at irregular intervals; the patient will be remarkably voracious; all his paſſions will be very ſtrong; his lucid intervals ſhort; his ſleep ſeemingly of a longduration, but, in fact, this ſleep is nothing but doſing; when he awakes he will ſeem fully occupied with ſome favourite ſubject, ſuch as ſinging, hunting, dancing, &c. His recollection will ſometimes ſerve him ſo as to know particular perſons, but that will not laſt long."

After having deſcribed the effect of the diſorder, he next enters minutely into an inveſtigation of the ſeat of it. And here with his uſual ſeveritya gainſt his brethren, the phyſicians, he ſays, " They, poor ignorant men, think this is adiſorder *in the head,* whereas, in fact, it ariſes from an injury which is received in the diaphragm, or midriff. The uſe of this membrane is (beſides ſuſtaining the upperparts of the abdomen) to convey cooling moiſture to the brain, in order to cool the hot humours which fly to it from the ſeveral parts of the inteſtines, and particularly the liver. Now, if the diaphragm be ſtrained, bruiſed, or otherwiſe hurt, it conſequently fails in performing its function, and the brain will ſuffer a delirium, more or leſs, in proportion as the diſorder in the diaphragm is better or worſe."

He then ſtates the manner in which this malady may ariſe. "It may happen by overlifting, by fighting, by violent riding, by want of a proper quantity of nouriſhment, whereby the membrane loſes its tone and vigour, and fails in its duty. Hence the firſt ſymptom of approaching death, which appears in people who are ſtarved, is a delirium, which is occaſioned by a heat in the brain, for want of proper moiſture from the midriff."

He next points out the remedy, which he confeſſes is very difficult; inaſmuch as the midriff, being a membrane only, will not yield to the ſame remedies that the muſcular part of the body will. Having a view towards "keeping the fever under, the internals ſhould be ſtrengthened by nouriſhing aliment. The cheſt and abdomen rubbed with aromatic and corroborating oils—the habit prevented from being too lax—and the bowels if tending to laſſitude, ſhould be bound up, and kept in due tone."

He then gives a variety of oils and ſimples, which are extremely uſeful in this diſorder; and concludes with adviſing conſtant attention to the patient; to indulge his deſires as often as it may be done with ſafety, but not to diſturb his inteſtines with too much phyſic, and thereby weaken and injure, inſtead of relieving, the patient.

In a ſimilar way does this learned author proceed in the treatment of all the infirmities incident to mankind, carefully pointing out, by anatomical rules, the *ſeat* of the diſorder, and then applying ſuch ſimple medicines and regimen as Nature herſelf directs, without expoſing the patient to the danger of violent experiments, or torturing his inteſtines with irritating drugs, which, inſtead of effecting a cure, often augment the diſeaſe, and not unfrequently occaſion premature death.

Some authors have laboured to prove, that the difference of opinion betwixt Culpeper and his brother phyſicians originated entirely from his own ſurly and vindictive diſpoſition. But whoever has taken the pains to inveſtigate the controverſy, will find this aſſertion moſt remote from the truth. He found the *practice* of *phyſic* directed more by terms of art than by principles of nature; and governed more by avarice than by a genuine deſire of reſtoring health and ſtrength to the deſponding patient. He condemned this practice, by expoſing the wickedneſs of ſome and the ignorance of others; and, though he had the whole medical *corps* to encounter, yet ſuch was the force of his reaſoning, and the ſuperiority of his abilities, that they ſubmitted to the ſentence he had paſſed upon them without the formality of a defence.

But, after a while, the allied ſons of *Eſculapius*, having diſcovered Mr. Culpeper's practice was guided by aſtrological precepts, rallied again, and renewed the combat with accumulated fury. Every inſulting reflection, calculated to impeach his underſtanding, was levelled at him; and the occult properties of the celeſtial ſyſtem was ridiculed and denied. Our author, however, was not to be driven from his purpoſe. He immediately publiſhed a tract in defence of the aſtral ſcience, which he maintained againſt the united oppoſition of both the Colleges; and, by introducing it into his practice, he performed cures which aſtoniſhed his competitors, and rendered his name immortal.

Experience, therefore, ought to convince us, however oppoſed by abſtract reaſoning, that there is indiſputably an innate and occult virtue infuſed into all ſublunary things, animal, vegetable, and mineral, by the action of the heavenly bodies upon the ambient and elementary matter, which, by the motions and mutations of the luminaries being conſtantly varied, produce that aſtoniſhing variety in Nature, which is infinitely beyond our knowledge and comprehenſion. Hence ariſe the ſympathies and antipathies ſo aſtoniſhingly conſpicuous in all the productions of the earth, whether animate or inanimate, in men or brutes, in vegetables or minerals, and in every ſpecies of matter definable to our ſenſes. Here alſo we diſcover the *eſſential properties* and *firſt ground* of all medicine, and are furniſhed with the beſt reaſons why it is impoſſible to preſcribe remedies at all times applicable to the ſtupendous varieties afflicting the body of man, without the aid of ſydereal learning.

There is no doubt but the remote as well as the propinquate cauſes of things ought ſeriouſly to be inveſtigated both by philoſophers and phyſicians; or elſe the muſic of ſcience will often fail of its harmony, and produce diſcord and diſguſt. The planetary influx, and the force of the ambient, is as neceſſary to be conſulted as the ſtructure of the body, and the laws of pulſation; otherwiſe our practice will be imperfect, and our ſucceſs determined by chance. For this reaſon the learned *Senertus*, in his *Elements of Phyſic*, highly commends thoſe modern phyſicians, who unite aſtrological with medical knowledge: " For,"—continues this ingenious author,—" the ſtars act upon inferior bodies, not only by heat and light, but by *occult* influence;—nor can it be doubted but that all plants are under the government of ſome particular planet, and perform their operations by virtue of the ſympathy co-exiſtent in their nature."

By the right knowledge of times and ſeaſons, of cauſes and effects, the moſt important cures have unqueſtionably been performed. " No man, ſays Galen, can reaſonably deny, but that the natural ground of medicine and diſeaſe depends much upon aſtral influx and elementary impreſſion; and hence it is, that by the nativity or decumbiture of the patient, we are enabled to diſcern both the cauſe and concluſion of the diſeaſe; and, by conſidering the quality of the principal aſpects in airy, watery, earthy, or fiery, ſigns or conſtellations, all doubts and difficulties are removed; a plain and obvious mode of treatment preſents itſelf to our view; and furniſhes a ſtriking proof of the wiſe œconomy of the Supreme Being, in governing this inferior world by the influence and energy of the ſuperior bodies, whoſe very *minutiæ*, as well as more magnificent phenomena, are invariably obedient to a regular and unerring law."

But, although the aſtrologic ſcience be thus uſeful in guiding our medical enquiries, and neceſſary in forwarding the cure of remote and latent diſeaſes; yet were the enemies of Culpeper, like many of the preſent day, exultingly forward to condemn that which they do not underſtand, and by attempting to baffle the ſecret operations of nature, and the ſtrong influences of the planetary ſyſtem—of the *Pleiades*, *Arcturus*, and *Orion*, they expoſe the weakneſs of their own imaginations, which they inſultingly oppoſe to *the glorious hoſt of heaven*.

Perfectly indifferent, myſelf, as to the cavils of diſſatisfied critics or to the cenſure of intereſted men, I ſhall revive that ſimple practice of Culpeper, which ſpread, through the Britiſh realms, the happy art of reſtoring to priſtine vigour—the decaying life and health of mankind. For this purpoſe, I have incorporated into the preſent edition of his PHYSICIAN and HERBAL, every uſeful part of all his other works; and have added a ſelection of eaſy rules, for attaining an intimate acquaintance with all the Britiſh herbs and plants; for diſcovering the real planetary influx; and for gathering them at thoſe particular ſeaſons when they imbibe a double portion of efficacy and virtue.

In gathering herbs for medicinal uſes, the planetary hour is certainly of importance, however modern refinement might have exploded the idea. In nature, the ſimpleſt remedies are found to produce the moſt ſalutary effects; and in earlier times, when the art of medicine was leſs obſcured, and practiſed more from motives of benevolence, the world was leſs afflicted with diſeaſe, and the period of human life leſs contracted. The laboratory of nature, were it but conſulted, furniſheth ample remedies for every curable diſorder incident to mankind; for, notwithſtanding the parade of compound medicines, the art of healing conſiſts not ſo much in the preparation, as in the due application, of the remedy. Hence it happens that old women, without education or abilities, by the help of a ſimple herb gathered in the planetary hour, in which hour it imbibes its greateſt ſtrength and eſculent virtue, will ſometimes perform very extraordinary cures, in caſes were the regular-bred phyſician is abſolutely at a loſs how to treat them.

I would not here be underſtood to caſt any unworthy reflections upon thoſe exalted characters, who have made phyſic, and the alleviation of human infirmity, the principal ſtudy of their lives. The many invaluable diſcoveries lately added to the Pharmacopœia, both from the vegetable and mineral worlds, are ſtrong arguments of the neceſſity of regular practice and of profeſſional education in forming the Phyſician. But, were the bulk of theſe gentlemen to conſult a little more the planetary influence, and the effects of Saturn and the Moon in each criſis and critical day, and regulate their preſcriptions accordingly, I am perſuaded more immediate relief would in moſt caſes be afforded to the ſick and languiſhing patient. Surgery, too, which, like a guardian angel, ſteps forward to alleviate the perilous accidents of the unfortunate, would gain much improvement by the like conſiderations. It is not the humane and liberal profeſſors of phyſic or ſurgery, whoſe practice deſerves cenſure, but that mercenary tribe of pretenders to phyſts who now pervade the kingdom, and, like a ſwarm of locuſts from the eaſt, prey upon the vitals of mankind. Theſe monſters in the ſhape of men, with hearts callous to every ſentiment of compaſſion, have only *fees* in view. Governed by this ſordid principle, they ſport with life, unmoved amidſt the bitter anguiſh and piercing groans of the tortured patient, whom, when too far gone for human aid to reſtore, they abandon to deſpair and death.

To prevent as much as poſſible the growth of ſo enormous a traffic, it requires that the practice of phyſic, inſtead of being clothed in a myſtic garb, ſhould be put upon a level with the plaineſt underſtanding, and the choice and quality of our medicines be rendered as obvious and familiar as our food. Inſtinct in the brute ſpecies, furniſhes this diſcrimination in the moſt ample and ſurpriſing manner; and in the primitive ages of the world, when men *were rich in years*, and *bleſſed with length of days*, it was the cuſtom to conſult individually their own complaint, and their own cure. To reſtore this primitive practice, was the godlike aim of the immortal Culpeper, when he compiled this invaluable Work; for, ſince it was the intention of our beneficent Creator to provide a natural remedy for all our infirmities, ſo it would be derogatory to its attributes, to ſuppoſe the knowledge of them limited to a few, or confined to a ſmall claſs of his creatures. On the contrary, this knowledge lies open to the wayfaring man—it grows in every field, and meets us in all our paths; and was mercifully given to alleviate the pangs of diſeaſe—to irradicate the peſtilential ſeeds of infection—to invigorate the conſtitution, and to ſtrengthen Nature—eventually reducing the perils to which we are expoſed, and making roſy HEALTH the Companion of our lives!

# INTRODUCTION.

SO much has the faſhion of the times encreaſed the uſe of foreign drugs and noſtrums, that it has become a ſubject of diſputation in the ſchools, Whether medicine be moſt *beneficial* or *injurious* to mankind. Many there are, who condemn the FACULTY and the PROFESSION, as the greateſt enemies of ſociety; and who would ſooner part with life and fortune than place themſelves in the power of either. Yet the one, when conſulted with caution, is the beſt protector of our lives; and the other, when guided by integrity, is the ſecureſt guardian of our liberties. It is not the uſe but the abuſe of them which draws down a curſe upon poſterity; whilſt a ſeaſonable and prudent reſort to either is congenial to the bleſſings of health and freedom.

The laws of phyſic are agreeable to the laws of nature. Phyſic imitates Nature. Its deſign is, to preſerve the body in health—to defend it from infirmity—to ſtrengthen and invigorate the weak, and to raiſe the dejected. In a word, the ſalutary effect of natural medicine keeps the body in a progreſſive ſtate of health and comfort, until the approach of death—that certain and inevitable conſequence of our exiſtence, which no art or invention, nor the greateſt power of princes, can prevent or reſiſt. Let it then be our wiſdom, after attending to our eternal concerns, to be careful in ſecuring the moſt valuable of our temporal ones, namely that of HEALTH; for ſhe is the moſt excellent companion, the richeſt treaſure, and the beſt of earthly poſſeſſions; without which, nothing here can be eſteemed a bleſſing.

Hence it becomes evident that the ſtudy of Phyſic ought to form a part of the education of every private gentleman, and ſhould become the amuſement of every individual whoſe occupation in life affords an opportunity of inveſtigating this valuable branch of literature. No ſcience preſents to our contemplation a more extenſive field of important knowledge, or affords more ample entertainment to an inquiſitive or philanthropic mind. Anatomy, BOTANY, Chemiſtry, and the Materia Medica, are branches of Natural Hiſtory, fraught with ſuch amuſement and utility, that he who neglects them can have no claim to taſte or learning. The vegetable world, with its occult virtues and power, is of all others the ſublimeſt ſubject for the exertion of genius, and affords the higheſt gratification to a benevolent mind: ſince there are no infirmities incident to our fallen nature that it does not enable us to alleviate or remove.

It is a melancholy reflection, daily confirmed by obſervation and experience, that one half of the human ſpecies, labouring under bodily infirmity, periſh by improper treatment, or miſtaken notions of their diſeaſe. What greater inducement then can be offered to mankind, to acquire a competent knowledge of the ſcience of phyſic, than the preſervation of their own lives, or that of their offspring? Not that it is neceſſary for every man to become a phyſician; for ſuch an attempt would be abſurd and ridiculous. All I plead for is, that men of ſenſe, of probity and diſcernment, ſhould be ſo far acquainted with the theory of phyſic, as to guard their families againſt the deſtructive influence of ignorant or avaricious retailers of medicine. For, in the preſent ſtate of things, it is much eaſier to cheat a man out of his life than of a ſhilling; at the ſame time that it is almoſt impoſſible either to detect or puniſh the iniquitous offender.

The benefits reſulting from medicine as a trade are principally derived from thoſe unfortunately fanciful and imaginarily diſordered patients, whoſe fortunes are ample, and whoſe eſtabliſhments compriſe an annual proviſion for the phyſician and apothecary. Others again, whoſe diſcernment is leſs defective, but whoſe circumſtances are ſufficient, are equally made the dupes of "*the ſecrets of trade*." Diſeaſe is prolonged, and nervous complaints brought on, by an exceſſive or improper uſe of drugs, given for the purpoſe of increaſing fees, or multiplying the items of an apothecary's bill. Yet theſe infatuated patients ſhut their eyes againſt the light of reaſon, and ſwallow every thing that is adminiſtered to them, without daring to aſk the neceſſity of the preſcription, or quality of the doſe. Implicit faith, which in every thing elſe is the object of ridicule, is here held ſacred, though at the expence of our conſtitutions. Many of the faculty are no doubt worthy of all the confidence that can be repoſed in them; but, as this can never be the character of every individual in any profeſſion whatever, it would certainly be for the ſafety and honour of mankind, to have ſome check upon the conduct of thoſe to whom we entruſt ſo valuable a treaſure as Health.

Perſons who move in a middling ſphere of life too often become objects of ſimilar impoſition. The nature of their avocations, and the attentions requiſite for buſineſs, beget infirmities, which, though eaſily removed by change of air and ſimple regimen, are frequently encreaſed by irritating drugs, until the conſtitution receives a ſhock too violent for medicine to reſtore. The lower orders of ſociety, however, and particularly the poor, are not expoſed to this danger. Their misfortunes ariſe from an unfeeling inattention and neglect on the part of thoſe who are called to their aſſiſtance; but by whom they are frequently left either wholly deſtitute of advice and of medicines, or are obliged to put up with ſuch as it would be much more prudent to avoid. How extenſively advantageous then would medical knowledge prove to men in almoſt every occupation of life? ſince it would not only teach them to know and to avoid the dangers peculiar to their reſpective ſtations, but would enable them to diſcern the real enjoyments of life, and be conducive to the true happineſs of mankind?

I know there are many humane and well-diſpoſed perſons of ſenſe and diſcernment who poſſeſs the diſpoſition and the ability of ſupplying this defect in medical attention to the poor, did not the dread of doing ill ſuppreſs their inclination to do good. Such perſons are alſo deterred from the moſt noble and praiſe-worthy actions, by the fooliſh alarms ſounded in their ears by a ſet of men who raiſe their own importance by magnifying the difficulties of performing cures, who find fault with what is truly commendable, and ſneer at every attempt to relieve the afflicted which is not ſanctioned by their preciſe rules. But theſe gentlemen muſt excuſe me for affirming, that the practice of ſuch charitable perſons, a little aſſiſted by medical reading, and directed by the ſimple dictates of nature, is frequently more ſucceſsful than the practice of profeſſional men, who are ſo intent upon *doſing* the patient, that things of greater import are neglected and forgotten.

To aſſiſt the well-meant endeavours of the humane and benevolent, in relieving diſtreſs, and eradicating diſeaſe, is an attempt which I truſt will meet the countenance and ſupport of every ſober friend to ſociety. I am well aware, that he, who ſtands forward to promote the public welfare at the expence of a particular profeſſion, muſt excite enmity, and draw upon him the clamour of intereſted individuals. But the ſolid comforts reſulting from a ſenſe of doing good, and the reflection of becoming inſtrumental in preſerving the health of thouſands, ſurpaſs the fleeting praiſes of the giddy multitude, or the ſmiles of ſelf-exalted and ambitious men.

# CULPEPER's ENGLISH PHYSICIAN,

AND COMPLETE

# HERBAL.

## Of the natural APPROPRIATION of HERBS in the CURE of all DISEASES.

THE temperature, virtues, and uſe, of Plants, as ſerving to heal or ſuſtain the body in health; as alſo their dangerous qualities, and the remedies againſt them; are well worthy our enquiry. This ſpeculation is divided into two parts. 1. Therapeutic or curatory. 2. Threptic or alimentary. In both which, vegetables may be conſidered according to their ſubſtance and conſiſtence, or elſe according to their accidents.

I. According to their ſubſtance or conſiſtence, they are, 1. Thin or groſs. 2. Lax or conſtrict. 3. Clammy or brittle. 4. Heavy or light. Tenuity of parts is in thoſe things which are aerious in eſſence and ſubſtance; which, being ſubtile, do eaſily communicate their virtue unto any liquor, and are of eaſy diſtribution in the body, eaſily actuated, and not long abiding; and is in matter not much compact, but eaſily divided by natural heat, having little of earth, and that mixed with much humidity, or elaborated by fiery heat, as in things very acid, ſharp, and friable, for the moſt part. Craſſitude of parts is in thoſe things which are terrene; which, being more groſs, do not quickly communicate their virtues unto liquids, and therefore the virtues thereof are exerted in the ſtomach, and ſeldom or ever paſs unto the liver; and ſuch have much matter, as in mixtures very terrene, or exquiſite mixtures of the aqueous humidity and terrene, without much prevalency of heat, ſo for the moſt part are auſtere, acerb, ſweet, bitter, ſalt, and few inſipid. Rarity is in dry bodies; hardneſs in the dry and terrene. Clammineſs in moiſt bodies: brittleneſs in dry. Heavineſs in thick bodies: and lightneſs in the rarefied. Tenuity looſeneth and penetrateth; craſſitude obſtructs; ſoftneſs lenifies and conglutinates; and hardneſs reſiſteth and drieth up.

II. According to their accidents, they may be taken notice of, as medicamentous and alimentary. 1. As medicamentous, and ſo according to their immediate and more remote accidents. 2. According to their more immediate, *i. e.* the qualities, and way of finding them out.

The Pototetology, or qualities, firſt, ſecond, third, and fourth. The firſt are, Calidity, or heat, which cauſeth motion, and diſpoſeth the parts by a right conjunction and ſituation thereof. It heateth, ſubtilizeth, digeſteth, openeth, muturateth, and rarefieth, and cauſeth agility: if exceſſive, it doth not aſcend, inflame, attract, or diſturb, as *thapſia*, &c. 2. Frigidity, or coldneſs, doth cool, conjoin, inſpiſſate, and hinder digeſtion, by the obtruſion of calidity, and by ſhutting the paſſages hindereth diſtribution: alſo, if exceſſive, it ſo filleth that it expels the juice, coagulates, and congeals, as poiſon, &c. 3. Humidity, or moiſture, is of eaſy ſeparation, lenifying and lubrifying: if exceſſive, it burdeneth the ſpirits and loadeth the ſame: and, if aqueous, it cauſeth nauſeouſneſs, and ſuffocates the excitation of heat, cauſeth flatulencies, oppilations, ſlowneſs of action, and debility of motion, in all the parts: otherwiſe it lenifies, lubrifies, looſeneth, maketh the blood and ſpirits more groſs, and obtunds the acrimony of humours, as mallows, &c. 4. Siccity, or drineſs, doth colligate and bind, and cauſes a ſtronger diſpoſition of the body: if exceſſive, it conſtringeth the paſſages and hindereth the excretion, preſſes forth the juices out of the body, and cauſeth tabefaction: if in the laſt degree, it conſumeth moiſture, cauſeth interception, ſuffocation, and death, as creſſes, &c. Here the degrees are four. The 1ſt ſcarce ſenſibly altereth the body. The 2d manifeſtly, yet without trouble or hurt. The 3d vehemently, but without corruption. The 4th moſt violently, and with great hurt unto the body. In each of which degrees there are three manſions acting remiſsly, intenſely, or in a mean; or in the beginning, middle, or end, thereof.

The chemiſts, inſtead of theſe four qualities or elements, ſubſtitute, 1. their Sal, from which is all ſapour or taſte, which is as it were the aſhes of a body; for ſalt is a dry body, defending mixed bodies from putrefaction, of excellent faculty to diſſolve, coagulate, cleanſe, and evacuate; from which ariſeth all ſolidity of body, denominations, taſtes, and many other virtues analogous to the earth, as being firm, fixed, and the ſubject of the generation of all bodies, and is therefore called by chemiſts, *Sal, ſal commune, acerbum & amare, corpus, materia, patiens, fixum, ars, ſcuſus materiale.* 2. Sulphur, whence all odour or ſmell ariſeth, and is like the flame; or ſulphur is that ſweet balſam, oily and viſcid, which preſerves the natural heat of the parts; the inſtrument of all vegetation, accretion, and tranſmutation, and the original of all ſmells, both pleaſant and unpleaſant: therefore it is compared to the fire, eaſily receiving the flames, as all oily and reſinous bodies do: alſo it lenifieth and conglutinates or conjoineth contrary extremes, as Sal and Mercury, that being fixed and this volatile, it participating of both extremes, ſo it tempereth the drineſs of Salt and moiſture of Mercury as being viſcous; the denſity of Salt and penetration of Mercury by its remiſs fluidity, and the bitterneſs of Salt and acidity of Mercury by its ſweetneſs; therefore it is called, *Sal Petre, dulce, anima forma, agens, inflammabile, natura, judicium, & ſpirituale,* by the chemiſts. 3. Mercurius, whence is all colour, and is repreſented by ſmoke or fume; or Mercury is that acid liquor, permeable, penetrable, ethereous, and moſt pure, from which ariſeth all nouriſhment, ſenſe, motion, ſtrength, colour, and retardation of preproperant old age; ſo it is compared to the element of air and water: to the firſt, as being turned into vapours by the vicinity of heat; and to this, as being hardly contained by its own term, but eaſily in ſome others: or it is that eſſential body, that by its aëreal, moſt ſubtle, vivific, and ſpirituous, ſubſtance, is the pabulum of life, and the proximate inſtrument of the eſſence or form, and is called by chemiſts, *Sal ammoniacum, acidum, ſpiritus, idea, informans aut movens, vaporoſum, intelligentia, intellectus, glorioſum!* Alſo Mercury containeth a ſulphureous and ſaline ſubſtance; Sulphur a ſalt and mercurial; and Salt an oleaginous and material; and the phlegm and caput mortuum are not principles, but their integuments, and without all Hippocratic virtue; the firſt being only moiſt, the other dry and emplaſtic. Alſo, if Mercurial acid and ſharp vapours abound, there ariſeth the epilepſy, apoplexy, palſy, and all kinds of catarrhs and defluxions, and epidemic and contagious diſeaſes if venomous. Sulphur, if abounding, cauſeth inflammations and fevers, and the narcotica ſoporiferous diſeaſes. Salt exuperant cauſeth corroſions, ulcers, heat of urine if diſſolved, and tumours if coagulated. Thereto belongs Tartar, cauſing the ſtone, gout, &c.

The ſecond qualities are, 1. The malactic or mollifying, to which the ecquetic or ſuppurating hath affinity; for both have an equal and ſymmetric heat, and a correſpondent ſiccity, yet differing in mode. The ſuppurating doth produce heat moſt like unto that of the body, without any conſumption or addition of humidity. The emollient aſcends heat a little beyond the proportion of nature, and contracts a little humidity, wherefore that rather operates by quantity than by the quality of heat, but the emollient rather by quality. Therefore that which is exactly ſuppuratory is emplaſtic; yet ſometimes emollition is the conſequence of humidity, if joined with moderate calidity or heat, and is uſeful in ſchirrhuſſes and tumours; and, though emollition may be by humectation and evacuation, yet it is properly by healing, looſening, and callignation; emollients being moderately dry and hot, 20 or 30 in ſchirrhuſſes, and proportionably in other tumours. Hereto belongs the calaſtic or looſening; yet this is leſs hot and more moiſtening than the emollient, and of a thin ſubſtance. 2. Scleryntic or hardening, which properly is that which doth exſiccate without any exceſs of heat or cold; for cold alſo may make obdurate, as alſo too much heat, yet after another manner than only by exſiccation, for, though that which is dry is hard, yet all that is hard is not dry. But ſiccity doth dry and indurate two ways; *i. e.* by altering and making more dry the eſſence of the parts, which is moſt properly; or by conſuming the humours in the pores; yet ſometimes obduration may alſo be cauſed by repletion or fulneſs; and, ſome ſay, by cold and drineſs. 3. Araiotic and rarefying, or diaphoretic and reſolving, which are moderately hot, with tenuity of parts, and very little reſiccant or drying, for exceſſive heat doth not rarefy but burn, and by aduſtion doth condenſate and dry. But moderate heat openeth the paſſages, and deeply penetrateth by the tenuity of its ſubſtance, and eaſeth pain; alſo it openeth the pores and attenuates the ſubſtance. The proper diaphoretics are hot, dry, and of thin parts, attenuant, mollifying, and diſcuſſing wind; and the rarefacient moderately hot, like our own heat, moiſtening and of thin parts. 4. Pycnotic or condenſating, contrary to the rarefacient, contracting the pores, and incraſſating what is rarefied and humid, and making it more ſolid, which is in thoſe things which refrigerate, yet are not terrene, or aerious, but aqueous, and are not at all or but little aſtringent; for theſe do weakly contract and bind, *i. e.* by reaſon of their ſoftneſs. 5. Anaſtomotic or aperient, opening the mouths of the veſſels, and is in thoſe things that are of groſs parts, hot beyond the firſt degree, ſharp, and biting. 6. Stegnotic or binding, contracting, occluding, and conſtringing; ſhutting the mouths of the veſſels, and reſtraining ſenſible excretion; and is, in thoſe things which are frigid, of groſs parts, and without acrimony, as many terrene bodies are: for thoſe things, which ought ſtrongly to conſtipate and bind, muſt alſo have a more ſtrong and renitent faculty; yet ſome binders are hot and dry, and of thick ſubſtance; and others glutinous. 7. Helctic, epiſpaſtic or drawing, attracting the humours from the centre, and is in thoſe things which are hot and of thin parts: for that which is hot attracteth, and that more ſtrongly which hath a conjunct tenuity of parts; but thoſe moderately attract which are hot and dry in the ſecond degree, if in the third, more effectually; and chiefly thoſe that are ſo in the fourth: for the attraction is according to the degree of heat, and is either more natural, or by putrefaction. Yet ſome things attract ſpecifically, and not by a manifeſt quality: as things that are carthartic or purging, and alexitery, or reſiſting poiſon. 8. Apocrouſtic or repercutient, repelling the humours flowing from the center, as in thoſe things which are frigid and of groſs parts. For that which is cold repelleth, and, if it hath a craſſitude of parts alſo, it is more violent, as that which is acerbe or auſtere; yet thoſe things alſo repel which are aſtringents, eſpecially thoſe which are helped by the tenuity of their parts: for the thinneſs of the ſubſtance doth much conduce to aſtriction; therefore other things that are aſtrictive, by reaſon of the craſſitude of their ſubſtance, cannot eaſily penetrate the more remote parts, precluding the paſſages. Hereto may the defenſive and the intercipient be reduced, being cold, aſtringent, and repulſive. 9. Ryptic, abſtergent or cleanſing, removing glutinous and clammy humours in the ſuperficies, or adhering to the pores of the ſkin, or ulcers, and is in thoſe things which have power to exſiccate with tenuity of ſubſtance, neither is it of any great moment whether they are hot or cold, by reaſon that neither quality hinders action, except exceſſive. Yet ſome count them hot chiefly, and dry, with a certain thickneſs of parts to vellicate the humours. 10. Eccathartic, ecphractic, and expurgatory, or removing obſtructions; not only opening the pores of the ſkin, but the inferior *ductus* of the bowels; as in thoſe things that are nitrous and bitter, although they have ſome ſmall aſtriction, and by reaſon of ſubſtance do not differ from thoſe that are abſterſive, but in degree; for thoſe things that cleanſe the pores and inward paſſage, have a great tenuity of parts, and are moderately hot; as thoſe things which are nitrous and bitter: but thoſe things which, being outwardly applied to the ſkin, do cleanſe the ſkin and ulcers from their excrements, are deſtitute of the aſtrictive faculty: but being taken inwardly, although having a certain aſtriction, yet nevertheleſs they may purge and cleanſe the greater paſſages, and withal ſtrengthen the ſame. Alſo ſome things lenify or purge by lubrifying, as fat things; by waſhing and abſterſion, as whey and beets; by compreſſion, as quinces; by extinaulation, as things hot, ſharp, ſalt, and of thin parts; and others electively and properly. And emetics cauſe vomit by relaxation and ſtimulation, the mouth of the ſtomach being weak; if the lower part, uſe dejectories. 11. Leptyntic or attenuating and making thin, as in all thoſe things that are expurgatory, hot, and of thin parts: extenuating groſs and tough humours; and are for the moſt part hot and dry, 2d or 3d, as things ſharp and aromatical; yet ſome are cold, as lemons, &c. but of thin parts. Hereto belong the temetic, or inciding againſt viſcid humours, which are more ſtrong. And diſſolvers of grumous matter, and coagulated; as alſo extenuants of fat, hot and dry, 3d, and of thin parts: and the chataſtic or laxants, moderately hot, moiſt, and thin. 12. Emplaſtic, viſcid, or clammy, contrary to the abſterſive; for, being applied, it doth tenaciouſly inhere in the pores of the ſkin, fill and obſtruct the ſame, as in thoſe things that are fat and glutinous; as alſo terrene, wanting acrimony and aſperity, or roughneſs. Hereto may be referred the epiceraſtic or levigating, helping aſperity, by being emplaſtic or moderately moiſt. And the emplaſtics are temperate, without evident heat, cold, or acrimony: ſome alſo have a thick terrene eſſence or conſiſtence, drying without biting; and others aqueous, or aereal, ſo are tenacious. 13. Emphractic or obſtructing, pachyntic, or thickening, which are the ſame: for, as thoſe things which are detergent and purging do free the pores and paſſages from obſtruction, ſo theſe obſtruct and fill the ſame, and make the humours of the body tough and thick; and are cold, or temperate without any acrimony, and of a thick terrene ſubſtance. 14. Anodyne, paregoric or eaſing pain, as in thoſe things which have thin parts, and are moderately hot, not much exceeding the temperate, i. e. being hot in the firſt degree, and rarefacient; ſo evacuating, digeſting, rarefying, extenuating, concocting, and equalizing whatſoever humour, either ſharp, tough, or groſs, is inhering in the ſmaller pores, or grieved parts: and all vaporous craſs, groſs or cold ſpirits, not finding way of evacuation; and are moiſtening, aqueous or aereal, of thin ſubſtance, and not aſtringent. 15. Narcotic, or ſtupifying the parts by its coldneſs, and not properly mitigating the pain, nor taking away the cauſes of the grief; yet ſtupor is ſomewhat leſs than inſenſibility, or the privation of ſenſe: the ſame alſo is hypnotic, or ſomnific, and cauſeth ſleep being taken, i. e. its ſubject, which doth vehemently refrigerate, i. e. in the 4th degree; ſo that it doth not only ſtupify the ſenſe, but, being liberally taken, cauſeth death, as opium, and that not only by its exuperant quality, but alſo by a certain propriety of ſubſtance and its concurring eſſence, its narcotic vehemency being but little repreſſed by the mixture of hot correcters, though it hath ſome bitter parts. 16. Amyctic, metaſyncritic, or rubefacient, cauſing redneſs, contrary to the former, cauſing pain, as in thoſe things which heat and diſſolve unity; of this kind alſo are eſcharotics, cauſing cruſts, which are hotter, cauſtic or burning; not only hot and dry in the fourth degree, but alſo of a groſs conſiſtence; therefore, being fixed in any part, they excruciate and torment the ſame by their ſtiffneſs: like unto theſe, are thoſe things that are ſeptic or corroſive, which are vehemently hot and dry, but of thin parts and conſiſtence; which therefore with a little pain and biting, or elſe without any ſenſe of pain, eliquate the part, and are called alſo putrefactives: hereto alſo belong the Pſilothra, extirpating the hair; and Veſicatories, very hot, and of thin parts.

The third qualities ariſe from the mixture of the firſt and ſecond, and are, 1. The Ecpuetic or ſuppurating, turning into matter contuſed fleſh, and humours remaining in ſwellings, as in thoſe things which are moderately hot, and next unto emollients, yet differing in this, that they have alſo an emplaſtic faculty, obſtructing the pores, increaſing the ſubſtance of heat, and not intending the quality; and are alſo called peptics or maturatives. 2. Sarcotic or generating fleſh, as in thoſe things which produce fleſh in hollow ulcers, and fill the cavities, and are hot in the firſt degree, a little deterſive, and that without biting and aſtriction. Alſo moderately drying, viz. under the ſecond degree. And ſuch as impinguate, or make fat, are heating, nouriſhing, impulſive, attractive, retentive, or ſpecific; as the ſeed of hemp, kernel of the Indian nut, and powder of charcoal. 3. Colletic or conglutinating, as in thoſe things which dry in the ſecond degree, and are in a mean as to thoſe which generate fleſh, and cicatrize; they are not abſterſive, but aſtringent, and prohibit the flux of humours to the lips of wounds, ulcers, and fiſtulas; they are alſo called ſymphytics, traumatics, and enaima; and are temperate, and of a thick ſubſtance, ſtronger or weaker according to the perſon or part. 4. Epulotic or cicatrizing, as in thoſe which greatly dry and bind without biting, drinking the humidity of the fleſh, and contracting the ſame, and covering with a thin callus like unto the ſkin; therefore do more dry than incarnatives or glutinatives, for they bind, contract, conſtipate, and indurate; and are of thick ſubſtance, and cold: there is alſo a ſharp and biting epulotic that conſumes dead fleſh, called cathairetic; and a third drying without aſtriction. 5. Porotic or generating callus, by which broken bones are ferruminated and knit, and is neither bone nor fleſh, but betwixt both, being a hard, dry, white, body; to the generation of which are required a convenient diet, and medicines applied which are emplaſtic and moderately hot, drying, thickening, hardening, and binding. 6. Diuretic or provoking urine, as 1. In thoſe things that are moiſt and liquid, and of a thin conſiſtence, and eaſy penetration, encreaſing the quantity of urine; ſo operate by accident. 2. In thoſe things which purge and attenuate and open the paſſages, ſome of which are cold, and of thin parts; ſometimes expelling what ſticks in the paſſages; which operate after a middle way, ſometimes by accident, tempering exuperant heat which ſeizeth on the veins, and reſolveth the ſerous humidity, that the humours may be more eaſily attracted by the reins, and deſcend by the bladder. 3. In thoſe things which purge the paſſages, and open the ſame, extenuate groſs humours and the blood, and ſeparate what is extenuated from the more groſs parts: which the reins then eaſily attract and ſend away by the urinary paſſages; which kinds of diuretics are very hot and dry, to wit, in the third degree, ſharp, and of a very thin ſubſtance, coactive and ſeparating. 7. Lithontriptic or breaking the ſtone, diſſolving and expelling the gravel, as in thoſe things which are diureptic, hot, dry, and of thin parts; ſharp, but more remiſsly, and ſomewhat bitter. Alſo ſome do it by inciſion and deterſion, without much heat; ſome by aſperity; and others by occult property. 8. Emmenonagogic or drawing out the terms, as in thoſe things which are hot and of thin parts, that they may concoct and digeſt crude humors, extenuate and incide the groſs and rough, and remove obſtructions by cleanſing the paſſages: ſuch as are all proper diuretics: which alſo promote the expurgation of the menſes; and, if they are alſo ſtinking or bitter, they are more effectual: ſtinking things depreſſing the womb, and the bitter being purging. There are alſo accidental hyſterics; as thoſe which are analeptic, or ſtrengthening after extenuation; or which refrigerate and humect the body dried by too much heat: to theſe alſo have affinity, thoſe things which expel the ſecundine and dead-birth; eſpecially thoſe which are more ſtrong, i. e. hot and of thin parts, ſtinking and bitter with acrimony, eſpecially if taken in a great quantity and often. The proper are hot 2° or 3°, and dry 1° or 2°, of meanly groſs ſubſtance, and bitter with acrimony: the contrary are the aſtringent. 9. Bechic, or helping the cough, as in thoſe things which cauſe or ſtop the ſame: for thoſe things which conduct to the expectoration of groſs humours, do alſo cauſe coughing; but, on the contrary, thoſe things which incraſſate thin humours, ſtop and eaſe it: but thoſe things are hot and of thin parts, and extenuating, which expectorate tough humours; yet there are alſo others which in ſome meaſure purge the breaſt, not much hot, nor very dry, but a little moiſtening, or at leaſt lenifying what is exaſperated; yet diuretics of the middle kind alſo are agreeable to the breaſt and lungs; which, if they are cold, incraſſate thin humours and ſtop coughing, and eſpecially thoſe that are narcotic, or ſtupifying. 10. Galactogenetic or generating milk, as partly in meats, partly in medicines; as for meat, it is ſuch as is euchymic and polytrophic, or of good juice and of much nouriſhment, and a little hotter and drier if the blood be cold and pituitous; but more moiſt and leſs hot, if troubled with choler. Medicaments cauſing milk, are of thin parts and hot, and of affinity to thoſe things which properly provoke urine, yet moſt gentle: but thoſe things which are more ſtrong and provoke the courſes, hinder the generation thereof by too much eliquation of the humours. Alſo things too cold, thickening, digeſting, or drying, hinder the ſame. 11. Spermatogenetic, or generating ſperm, as in thoſe things which are hot, and not very dry, but flatulent, as alſo aliment of good juice, and whatoever increaſeth the quantity of blood. Alſo it is ſtimulated by things that are ſharp, and hindered by things very cold and diſcutient. 12. Hydrotic or provoking

voking ſweat, as in things of thin parts, and hot; yet ſome are aſtringent and cold, working occultly. Alſo the coſmetic, for the ſkin, is extenuating, laxative, emollient, cleanſing, and diſcuſſing; for the teeth, cleanſing and binding; for the hair, healing, drying, and binding; for ſcurf, cleanſing and diſcuſſing. Note, as for the pharmic or ſternutatory quality, it is in thoſe things that are acrimonious, cauſing an irruption of the expulſive faculty; as errhines, that are hot, nitrous, exterſive, and ſharp; as white pepper, hellebore, ginger, pellitory of Spain, caſtor, cloves, ſneeſe-wort, and euphorbium finely powdered. Alſo the apophlegmatic is in things hot and acrimonious; yet ſometimes do it occultly, as in maſtic, raiſins, hyſſop, organy, marjoram, pellitory of Spain, ginger, white and black pepper, and muſtard-ſeed. The ſcholerobrotic is in things bitter and ſharp, &c. as wormwood, coraline, &c.

The fourth qualities are ſuch as follow the ſubſtance or property of the eſſence, and are found out only by experience; and are therefore called occult, latent, and ſpecific; as in poiſons, theriac and alexipharmic remedies, roborating the expulſive faculty, and being contrary, emplaſtic, aſtringent, emetic, cathartic, and ſudorific, with phlebotomy if need; amulets and cathartics, things antipathetic and ſympathetic, as alſo appropriate to any part, or adverſe unto the ſame; the greateſt ſign of which, according to ſome of the moſt learned authors, is ſignature. The poiotichnology, or way of finding out theſe qualities, is by manifeſt reaſon. 1. By oſmellogy, or odour or ſmell, which is either ſweet, familiar unto the ſpirits of the brain, and a ſign of heat, or ſtinking and offenſive, cold and moiſt; the firſt is in hot bodies, of thin parts, among which there is difference according to the degrees thereof; but thoſe things which are without odour, are of a groſs eſſence and humid, as thoſe things which are ſalt and auſtere; alſo ſuch things as are of a mordicant and bitter ſmell are hot, but thoſe that ſmell like vinegar and acerb are cold, for in ſome things the ſenſe of odours is like that of ſapors, yet not of ſo ſafe conjecture, by reaſon of the inequality of ſubſtance; for moſt bodies are of an unlike conſiſtence, of each of which parts odour ſheweth not the temper, but where there are tenuous effluviums or vapours, whereof the ſweet ſtrengthen the heart, the rank excite the animal ſpirits, the ſtinking help the ſuffocation of the matrix. 2. By chromatology, or colour, which is either, 1. Lucid, exciting the animal ſpirits, and drawing them outwards, as the white. 2. Or tenebroſe, calling them inwards, and cauſing ſleep, as the black. 3. Yellow, helping the jaundice. 4. Green, uſeful for the eyes: the white and pale ſhew moiſtneſs of temper and imbecility. The yellow proceed-eth from heat. The red and croceous, &c. ſhew exceſſive ſiccity and calidity or heat. The green and porraceous are ſigns of much moiſture. Alſo to the white may the candid be reduced; to the yellow, the luteous, wax-coloured, croceous, golden, honey-coloured, citron, fox-coloured, and vittelline; to the red, the light red, flaming, and ſanguine, colour; to the purple, the violet, fleſh-colour, and brunous; to the green, the praſſive, herbaceous, enginous, and porraceous; to the ſky-colour, the horn-white, grey, griſled, black, and blue, aſh-colour, pale, and murry; to the black, the dark. 3. By geuthmology, or ſapors, or taſtes, which, according to ſome, are, 1. more perceptible or manifeſt; as the ſimples, which are, 1. hot, firſt more hot, and ſo firſt of more thin parts, as the ſharp, ſecondly, of more thin parts, as the bitter, nitrous, and ſalt; ſecondly, leſs hot, as the ſweet, and is diverſe according to the diverſity of tenuity and humidity. 2. Cold, firſt of groſs terrene parts. Firſt, more groſs, as the acerbe: ſecondly, leſs groſs, as the auſtere and aſtringent. Secondly, of ſubtile aqueous parts, and doubtful, as the acid. Thirdly, the mixed, as the vinous, compounded of the acid and ſweet. 2. Leſs perceptible, and almoſt inſipid. 1. Aqueous, firſt more ſubtile, as the acquinſipid; ſecondly, more groſs. Firſt, glutinous, as the humilent; ſecondly, fat, as the oleous. 2. Terrene: 1. ſucculent, as the odoreous; 2. more dry, as the ligniterreous. The ſapors or taſtes are,

I. Active. 1. Bitter, wormwood-like, galliſh, ſaline, or aloetic, which is contrary to the nature of living creatures, the taſte whereof doth vellicate the tongue. It conſiſteth of terrene combuſt parts, of which ſome are more ſubtile: others, more groſs and terrene, exſiccated by exuperant heat, or coagulated by cold, as appears in opium and aloes. It is not nutritive, it openeth the mouths of the veins, cauſeth hemorrhages and thirſt, makes the blood fluxible: it attenuateth, incideth, biteth, exaſperateth, cleanſeth, melteth, attracteth, yet more moderately drieth and heateth; it conſumeth and reſiſteth putrefaction, drinking up ſupervacaneous humours, and reſiſting ſweetneſs: it is hot and dry in the ſecond degree, *terra uſta*. 2. Sharp, aromatical, biting, ſeptic or arſenical, hot, dry, and burning, pricking the tongue, and biting the mouth; it conſiſteth of thin, dry, and hot, parts, as pepper, onions, &c. If it be not vehement, and hot under the third degree; taken inwardly it doth penetrate, open, and attenuate thick humours: applied outwardly, it rarefieth the ſkin, and draweth forth humours: if it be hot above the third degree, it troubleth the head with thin vapours: if it be of a more groſs eſſence, it is cauſtic, and cauſeth bliſters and ſcabs: and, if it be of an adverſe ſubſtance, it is ſeptic and deadly: alſo it is of quick operation,

and

and ſtrong; it attracteth from remote parts, it ſeparates, corrodes, incideth, heateth, burneth, and inflameth; it reſolveth, diſcuſſeth, excoriateth, exulcerateth, and ſtrongly inciteth to expurgation; if of more thin parts, it is diuretical; if of thicker, cauſtic: it is more intenſe in drier bodies, and more remiſs where there is an aqueous humidity. It is hot and dry, *ex aqua & terra attenuata.* 3. Acid, or ammoniacal. It penetrateth the tongue with its tenuity, yet without any manifeſt heat. It conſiſteth of tenuous, cold, and dry, parts, as vinegar, the juice of lemons, &c. It penetrateth and incideth no leſs than the ſharp ſapor, therefore it incideth, attenuateth, biteth, detergeth, reſerates obſtructions, repelleth, and drieth: and, by reaſon of its penetrating coldneſs, it repels all fluxions; and by its ſiccity ſtops all eruptions of blood. Alſo it helpeth nauſeouſneſs, corrodes and condenſates without heat: it exaſperates and reſiſts putrefaction. It is of doubtful qualities, fiery and aqueous, hot and cold, and of all contraries. It is cold and dry in the ſecond degree, *aqua ignita cum halitu terreo.* 4. Nitrous, which is in a mean between ſalt and bitter; yet weaker than this and more intenſe than the other: it is biting and corroding, as nitre. It openeth the belly, and purgeth the reins, *terra ſpiritibus compulſa.* 5. Salt, or ſerous. It corrodeth the tongue by exſiccation, yet heateth not much; it conſiſteth in a mean matter with heat and drineſs, and is generated of that which is terrene and dry, attenuate and preaſſate by heat with an aqueous humidity, ſo not altogether terrene, as ſalt: therefore it contracteth the pores, incideth, detergeth, digeſteth, and drinketh up humidity, by its drineſs, without any manifeſt ſenſe of heat, and ſo reſiſts putrefaction. It openeth, biteth, exaſperateth, abſtergeth, cleanſeth, troubleth, provoketh to expulſion, purgeth, ſubverteth, the ſtomach, cauſeth thirſt, drieth, de-obſtructeth, aggregateth, condenſeth, roborateth, and contracteth. It is hot and dry in the ſecond degree, and corroſive. 6. Sweet, fat, honey-like, or ſaccharine. It dilateth the tongue, and is pleaſant, having no exuperant quality, and being in a mediocrity, as ſugar and honey; therefore it levigates what is exaſperated, lenifies, maturates, concocts, is anodyne, and only nouriſheth; alſo it digeſts, rarefies, diſtributes, looſeth, filleth the liver, ſtoppeth the ſpleen, and is hot and moiſt in the firſt degree, and of terraqueous parts. 7. Acerb, aſtrictory, pontic, or aluminous. It contracteth the tongue, and doth unequally exaſperate the ſame by exſiccation; it is near to the auſtere, but more troubleſome to the tongue, aſtringent, cold, and dry. The matter thereof is terrene and dry, without any manifeſt moiſture, in which coldneſs is exactly predominant with ſiccity, as ſervices: therefore as cold it repelleth fluxions, as aſtringent it ſtoppeth the force of humours; as dry, it doth coarctate, condenſe, and cicatrize wounds; as terrene, it incraſſates humours, and condenſates the ſuperficies; it ſhuts, corrugates, and indurates, ſo the auſtere. It reſiſts poiſon, and is cold and dry in the ſecond degree. 8. Auſtere, ſtyptic, aſtringent, or vitriolate. It moderately bindeth the tongue and mouth, coarctates the ſame with a certain aſperity, and doth in ſome meaſure refrigerate and dry. It conſiſts in a mean matter, participating of that which is terrene and watery, in which frigidity is predominant, as medlars and wild pears, &c. It manifeſtly refrigerateth, extinguiſheth, bindeth, and contracteth, moderately ſtops fluxions, and repelleth. It is ſubacerb, leſs cold and dry, and exaſperating, ſtopping, roborating, and indurating, *terra ſpiritu commota*, as vitriol. The aſtringent is weaker, as quinces. Mat. Med. ſicc. craſſ.

II. MEAN. 1. Oleus; it is fat, unctuous, and temperate; generated of that which is moiſt, aerious, and moderately hot, by elaxation of the watery part, whereby it becomes more aerial, as oil. It is ſlow and weak in operation, ſtopping the guſtic or taſting organs. It doth humect, lenify, and ſoften, looſen, obſtruct, and cauſe flatulencies and nauſeouſneſs, having a certain obſcure and remiſs ſweetneſs, and mean ſubſtance. 2. Humilent: the matter thereof is groſs, tough, aqueous, in which the earth, being well mixed, cauſeth corpulency; and it is humid, little affecting the taſte, more groſs and crude than the ſweet. It is emplaſtic, ſtopping the paſſages, conglutinates what is disjoined, lenifies what is exaſperated, and doth incraſſate, as mucilages, &c. Mat. craſſ. frig. obſcure. 3. Acquinſipid. It is ſcarce perceived by the tongue, hardly participating of any terrene ſiccity, and conſiſting in a crude juice; it is rather a privation than a ſapor: its matter is ſomewhat groſs, yet not altogether terrene, dry, or aſtringent, but moiſtened with a certain humidity, which alſo is not exquiſitely mixed by the activity of heat, as water. It is emplaſtic, ſtopping and obſtructing, lenifying what is exaſperated, and conglutinating that which is disjoined: and, although it hath ſome affinity to ſweet, yet it differeth in this, that it conſiſteth in a matter a little more groſs and crude: it refrigerateth, and doth more moiſten, i. e. from the the ſecond to the third degree.

III. PASSIVE. 1. Ligniterreous, which is more groſs, altogether terrene, and inactive; yet it hath ſome heat, ſpirit, and humidity, but exceeding little, as the *caput mortuum*, and dry bodies without juice. Mat. craſſ. *terra abſque ſpiritu depreſſa prorſus terrea.* 2. Adoreous, moſt agreeing to our nature, it recedes from ſweetneſs in this, becauſe its matter, being inactive, is hardly perceived, and it is more groſs; yet well tempered to a terrene equally-mixed ſiccity, which eaſily becomes paſſive, and is apt for diſtribution and ſolidity, as bread, corn. *Materia equalis receptibilis.* 4. By Aphelogy, or the tactile quality or touch: ſo craſſitude is a ſign of the abundance of terreſtrial parts, or humid and congealed: tenuity of the fiery and aerious: denſity of exſiccation or congelation; rarity of drineſs; hardneſs of ſiccity and earthineſs, except cauſed by the repletion of humours: ſoftneſs of humidity; gravity is the companion of denſity: levity of rarity; clammineſs of humidity; aridity or friability of ſiccity; ſmoothneſs of an aerious or aqueous humidity; aſperity of ſiccity. 5. By allotoſilogy, or diſpoſition, or mutability: ſo, that which the ſooneſt receiveth heat is counted hot; and that moſt cold which is ſooneſt congealed. 6. By pepeirology, or age; ſo, for the moſt part, thoſe things that are young, more humid; the old, more dry; alſo, whilſt they are growing and immature, they have an auſterity and acerbity; ſo, cold. 7. By phyteuteriology, or the place of growth; ſo, plants, growing by lakes are for the moſt part of a cold and moiſt temperature; the marſhy, cold and ſomewhat dry: the fluviatile, dry and very hot: the marine, cold and dry; thoſe of a fat ſoil, are hot and moiſt, or temperate therein; thoſe of an hungry ground, hot and dry: thoſe of a mean earth, tepid and ſuitable to man's nature; thoſe of a ſandy ground, hot and dry, and of thin parts; thoſe of a doubtful growth, are of a mixt temperature; the amphibious, if growing in ſpringy places, cold and dry; if in litoral and marine, hot and dry; the mountain plants are dry, hot, and of ſubtile parts; the field, moderately hot and dry; they that grow in hollow places, are cold and moiſt; the hilly, temperate; thoſe that grow wild, are colder and drier than the domeſtic; if of the ſame ſpecies, the domeſtic are milder and more weak. 8. By protergaſiology, or the operations of the firſt four qualities, as above-ſaid. 9. By experience, which in certitude exceeds all the reſt, and muſt be made with a ſimple body, without any external quality, and that in a temperate ſubject; in all which, that muſt be diſtinguiſhed which is done *per ſe* from that which is *per accidens.* Thus of the way of finding out the manifeſt qualities, i. e. of the firſt; after which the ſecond are known, as ariſing from the firſt; but eſpecially by ſapor or taſte.

Now follow the occult qualities; which are diſcovered, I. By phytognomy or ſignature, i. e. phytoptical or external, either in form, colour, or property; as repreſenting the parts of man's body, the humours, or diſeaſes; and ſo the appropriations are as follow. For the head in general: walnuts, piony, poppy, ſquills, larch-tree, its agaric, and turpentine, Indian nut, and flowers of the lily of the valley. For the brain: wood betony, ſage, roſemary, lavender, marjoram, primroſes,

roſes, cowſlips, bear's ears, lily of the valley, and miſletoe. For reſtoring hair: quinces, moſs, and maiden-hair. For the eyes: fennel, vervain, roſes, celandine, rue, eye-bright, clary, and hawkweed, herb Paris, grains, and anemony. For the ears: aſſarabecca, ground-ivy, ivy, poplar-tree, night-ſhade, ſow-fennel, and ſow-thiſtle. For the noſe: wake-robin, flower de luce, horſe-tail, ſhepherd's purſe, willow, biſtort, tormentil, cinquefoil, and ſow-bread. For the mouth in general: medlar, mulberries, mints, purſlain, and golden rod. For the ſcurvy: ſcurvy graſs, ſmall houſeleek, aloes, fumitory, and creſſes. For the teeth: pine, pomegranate, maſtic, maſter-wort, coral, coral-wort, reſt-harrow, henbane, and wild tanſey. For the drineſs of the mouth: flea-wort. For the diſeaſes of the throat, roughneſs, quinſey, king's evil, &c. throat-wort, date tree, winter-green, horſe-tongue, fig-wort, arch-angel, fox-glove, orpine, pellitory of the wall, wheat, barley, garlic, liquorice, fig-tree, hyſſop, ragwort, plantane, columbines, cudweed, and Jew's ears. For ſhortneſs of breath, coughs, expectorations, hoarſeneſs, &c. elecampane, almond-tree, vines, reeds, ſugar-cane, jujubes, ſebeſtens, ſcabious, coleworts, nettles, and turnips. For contracting women's breaſts: lady's mantle and ſanders. For breeding milk: aniſeſeed, nigella, mallow's dill, rampions, periwinkle, and lettuce. For ſwollen breaſts: fennel giant, gourds, baſil, beans, lentils, and lilies. For ſore nipples: dock-creſſes. For the lungs, ſtoppings, conſumptions thereof, &c. horehound, lung-wort, tobacco, ſun-dew, hedge-muſtard, colt's-foot, wood-bine, mullein, cowſlips of Jeruſalem, ſanicle, polypody, whortleberries, and ſweet Cicely. For the heart, qualms, faintneſs, &c. angelica, ſaffron, borage, violets, ſtrawberries, wood-ſorrel, balm, marigolds, ſwallow-wort, goat's rue, viper's graſs, pomecitrons, gentian, ſcordium, burnet, avens, cloves, clove-gillyflowers, lignum aloes, cinnamon, and viper's bugloſs. For ſtitches, and pains in the ſides: carduus benedictus, our lady's thiſtle, camomile, ſweet trefoil, melilot, oats, valerian, ſtitch-wort, flax, and linſeed. For purging the ſtomach: wormwood, myrobolans, groundſel, radiſh, black elder, oily nutben, ſena, daffodils, white hellebore, and purging caſſia. For breaking wind: carraways, cummin, camel's hay, ginger galanga, cardamoms, pepper, nutmeg, coriander, and orange. For cooling and ſtrengthening the ſtomach: apples, pears, peaches, apricots, plumbs, cherries, gooſeberries, and currants or ribes. For the liver: rhubarb, turmeric, agrimony, liverwort, ſuccory, alecoſt, and maudlin, docks, ſorrel, beets, ſmallage, cleavers, and chickweed. For the dropſy: elder, ſoldanella, briony, mechoacan, and jalap, broom, aſh, ague-tree or ſaſſafras, palma Chriſti or great ſpurge, glaſſwort, ſpurge laurel, toad-flax, and baſtard marjoram or organy. For the ſpleen: dodder, black hellebore, tamarinds, ſpleen-wort or miltwaſte, hart's tongue, fern, capers, tamariſk, germander, calamint, poley mountain, and lupines. For the reins, bladder, ſtone, and ſtranguary, &c. aſparagus, parſley, marſhmallows, goat's thorn, ſpikenard, ſweet-ſmelling flag, cyprus or Engliſh galingale, hops, knotgraſs, parſley pert, ſaxifrage, dropwort, gromel, onions, winter cherries, dog's graſs, butcher's broom, chervil, brooklime, hawthorn, lemons, cyprus-tree, kidney-wort, kidney-beans, oak, buck's-horn plantane, ſamphire, fraxinella, and alheal. For the cholic: bay-tree, holly, juniper, olive-tree, coloquintida, and bindweed. For the worms: centaury, lovage, tanſey, lavender cotton, carrots and parſnips, ſpignel, biſhop's weed, Engliſh worm ſeed, leeks, and horſe-radiſh. For looſeneſs, the bloody flux, &c. ſhumach, myrtle, ciſtus, blackthorn, bramble, teaſel, rice, flixweed, pilewort, and water betony. For provoking luſt: artichokes, ſea-holly, potatoes, ſkirrets, peaſe, rocket, muſtard, cotton, fiſtic-nut, cheſnut, chocolate, ſatyrions, and dragons. For abating luſt: agnus or the chaſte tree, hemp, water-lily, hemlock, camphire, and tutſan. For provoking the terms: mugwort, pennyroyal, ſouthernwood, ſavory, thyme, alexander, and anemony. For ſtopping the terms and the whites: comfrey, mouſear, yarrow, mede ſweet, adder's tongue, lunaria, trefoil, money-wort, darnel, flower gentle, blites, dragon-tree, beech tree, and haſel-nut tree. For the mother: mother-wort, feverfew, calamint, burdock, butter-bur, orach, aſſa fœtida, and cow parſnip. For expediting childbirth: birthwort, mercury, madder, ditany, dittander, pepperwort, holm-oak, and its chermes. For expelling the dead child and after-birth: ground pine, ſavin, and birch-tree. For ruptures or burſtneſs: rupturewort, thoroughwax, Solomon's ſeal, balſam apple, dove's foot, or crane's bill, and elm. For the French pox: guaiacum, china, and ſarſaparilla. For the ſwelling in the groin: ſtarwort, and herb Paris. For green wounds and old ulcers: St. John's wort, arſeſmart, bugle, ſelf-heal, ſaracen's confound, looſe-ſtrife, daiſy, and ſpeedwell. For drawing out ſplinters: pimpernel. For felons: woody nightſhade. For ſurbated feet: lady's bedſtraw. For excreſcences: agaric, galls, and other excreſcences of trees. For the jaundice: celandine, ſaffron, and centaury. For pimples, tetters, and ringworms: the bark of the birch-tree, and tree lungwort. For ſpots: garlic, wake-robin, friar's cowl, arſeſmart, and ſpotted lungwort. For the polypus: the root of the ſmaller celandine, and of polypody. For the ſcab: polypody and ſavin. For yellow choler: as aliment, ſaffron, beets, figs; as medicine, aloes, ſenna, wormwood-flowers, ſpurge, coloquintida, and rhubarb, &c. For praſſine choler: thoſe things which have a green and herb-like colour, as blites and orach. For pale choler: briony, having pale flowers. For melancholy: black blite, borrage, bugloſs, &c. For phlegm: gourds and lettuce. For mixed humours: things of mixed colour.

II. Aſtrological or internal, of which the appropriations are, to the planets, 1. To the Sun, which is a benevolent planet, moderately hot and dry, a friend to Jupiter and Venus, and an enemy to the reſt; and as it were the heart of the microcoſm, and therefore it produceth the vital ſpirits thereof, by which the whole univerſe is cheriſhed; and it is the fountain of peculiar influences, by which it particularly helpeth things familiar, and hindereth what is contrary to itſelf. It governeth the heart and arteries, the ſight cold and moiſt, and eyes; the ſinews and the brain with the Moon, and alſo with Mercury. Of ſickneſſes, ſwoonings, cramps, the ophthalmy, watering eyes, and the cardiac with Jupiter: pimples, heart-burning, tremblings, faintings, tympanies, diſeaſes of the mouth, convulſions, all diſeaſes of the heart, ſtinking breath, catarrhs, and putrid fevers; it governs the vital faculty, and the taſte which is hot and moiſt; alſo the attractive virtue with Mars, it being hot and dry, and the digeſtive hot and moiſt: under which are, angelica, aſh-tree, balm, one blade, burnet, butter-burr, camomile, celandine, centaury, eye-bright, St. John's wort, lovage, marigolds, miſletoe, piony, St. Peter's wort, pimpernel, roſa ſolis, roſemary, rue, ſaffron, tormentil, turnſol, viper's bugloſs, and walnut-tree: as alſo all ſpices, ſorrel, wood-ſorrel, mallow, borage, marjoram, dittany, gentian, ivy, elecampane, lavender, bay-tree, olive-tree, mints, date-tree, oranges, pomecitrons, thyme, vine-tree, wood of aloes, zedoary, maſtic, frankincenſe, and myrrh. 2. To the Moon, which is a planet in a mean, between good and bad; moderately cold and moiſt, a friend to Jupiter, Saturn, Venus, and Mercury, and an enemy to the other two; and is correſpondent to the brain, and therefore ſympathetic with the nervous parts and animal ſpirits; or it is the generatory of humidity, by which the whole univerſe is moiſtened; and is the fountain of peculiar influences, by which primarily and peculiarly it doth affect things familiar to itſelf, and ſecondarily things agreeing to Saturn, Jupiter, Venus, and Mercury, as being benevolent unto the ſame, or (as ſome) it is as it were the liver of the micocroſm. Under it are alſo the ſtomach, bowels, and bladder, as ſome ſay with Saturn. Of ſickneſſes, the cholic, phlegmatic impoſthumes, all kinds of oppilations, and the epilepſy with Mars and Mercury, the palſy with Saturn, and the menſtrual ſickneſs with Venus; alſo apoplexies, palſies, belly-ach, diſeaſes of the teſticles, bladder, and genitals; ſtopping and overflowing of the terms in women, dropſy, fluxes, all cold and rheumatic diſeaſes, the gout, ſciatica, worms in the belly, hurts in the eyes, ſurfeits, rotten coughs, convulſions, king's evil, ſmall pox and meaſles, crude humours, lethargies, and all phlegmatic diſeaſes: alſo the expulſive faculty, which is cold and moiſt. Under which are adder's tongue, cabbages, coleworts, columbines, water-creſſes, duck's-meat, yellow waterflags, flower-de-luce, fluellin, ivy, lettuce, water-lilies, looſeſtrife with and without ſpike heads, moon-wort, mouſe-ear, orpine, poppies, purſlain, privet, rattle-graſs, white roſes, white ſaxifrage, burnet ſaxifrage, wall-flowers, or winter gilly-flowers, and willow-tree; as alſo chaſte-tree, winter cherries, garlic, reeds, brooklime, onions, camomile, frogſtools, hyſſop, maſtic-tree, mandrake, nutmegs, walnuts, line-tree, water-plantain, turnips, houſeleek, and common leeks. 3. To Saturn, which is a malignant planet, diurnal, maſculine, and very cold; a friend to Mars, and an enemy to the reſt, and anſwereth to the ſpleen of the microcoſm: yet ſome aſcribe it to the head, as alſo Jupiter and Mars. Some ſay alſo, that Saturn ruleth the right ear, alſo the bones, fundament, and the retentive faculties, cold and dry, in the whole body; and the bladder with the Moon. Of ſickneſſes; the leproſy, cankers, quartan ague, palſy, conſumption, black jaundice, iliac paſſion, dropſy, catarrh, gout in the feet, and ſcrophulus; as alſo apoplexies, tooth-ach, all melancholic diſeaſes, cold and dry, trembling, vain fears, fancies, gout, dog-like appetite, hemorrhoids, broken bones, diſlocations, deafneſs, pains in the bones, ruptures, (if he be in Leo or Scorpio, or in an evil aſpect to Venus,) the chin-cough, pain in the bladder, all long diſeaſes, melancholic madneſs, fear or grief; he governs the memory alſo, which is cold and dry; and the hearing alſo. Under it are, barley, red beets, beech-tree, bifoil or tway-blade, bird's-foot, biſtort or ſnake-weed, blue-bottles, buckſhorn-plantain, wild campions, pilewort, cleavers or gooſegraſs, clown's woundwort, comfrey, cudweed or cotton weed, ſciatica creſſes, croſſwort, darnel, dodder, epithymum, elm-tree, oſmond royal, fleawort, flixweed, fumitory, ſtinking gladden, goutwort, winter green, hawkweed, hemlock, hemp, henbane, horſetail, knapweed, knotgraſs, medlar-tree, moſs, mullein, nightſhade, poly-pody, poplar-tree, quince-tree, rupture-wort, ruſhes, Solomon's ſeal, Saracen's conſound, ſervice-tree, ceterach or ſpleenwort, tamariſk, melancholy thiſtle, blackthorn, thoroughwax, tutſan or park (leaves and wood); as alſo aconite, chaſte-tree, parſley, ſtinking-tree, aſphodil, ſtarwort, orach, ſhepherd's purſe, capers, cummin, cypreſs, fern, black hellebore, great dock, mandrake, mulberry-tree, opium, herb truelove, pine-tree, ſavin, ſage, ſenna, and ſengreen. 4. To Jupiter, which is a benevolent planet, moderately hot and moiſt, a friend to all the reſt except Mars; anſwering to the liver, and cheriſhing the faculties thereof by its influence. Some affirm alſo, that he rules the lungs, ribs, ſides, veins, blood, and digeſtive faculty; the natural virtue of man, as alſo the griſtles and ſperm with Venus; the arteries and the pulſe. Of ſickneſs; the peripneumony, apoplexy, pleuriſy, cramp, the cardiac with the

Sun, quinſey, numbneſs of the ſinews, and ſtinking of the mouth; all infirmities of the liver and veins, apytumes about the breaſt and ribs, all diſeaſes proceeding from putrefaction of blood and wind, fevers, and other diſeaſes; he governeth the blood, hot and moiſt; ſo the judgment. Under which are agrimony, alexander, aſparagus, avens, bay-tree, white beets, water-betony, wood-betony, bilberries, borage, bugloſs, chervil, ſweet cicely, cinquefoil, alecoſt or coſtmary, dandelion, docks, bloodwort, dog's or quick graſs, endive, hart's tongue, hyſſop, ſengreen or houſeleek, liverwort, lungwort, ſweet maudlin, oak-tree, red roſes, ſauce-alone or jack by the hedge, ſcurvy-graſs, ſuccory, and our lady's thiſtle; as alſo almonds, walnuts, barberries, calamint, cherries, cornel-tree, hound's tongue, beans, beech-tree, ſtrawberries, aſh-tree, fumitory, liquorice, barley, white lily, flax, darnel, mace, apple-tree, mints, mulberries, myrobolans, nuts, baſil, olive-tree, organy, raiſins, pine-tree, peach-tree, roots of piony, poplar-tree, purſlain, plumb-tree, ſelf-heal, pear-tree, rhubarb, currants, madder, ſervice-tree, ſpike, conſound, wheat, violets, vine-tree, maſtic, ſtorax, ſugar, and all other ſweet things. 5. To Mars, which is a planet exceeding hot and dry, a friend to Venus, and an enemy to all the reſt; cheriſhing the bladder and gall of the microcoſm. Some ſay, he rules the left ear, apprehenſion, and cauſeth valour; as alſo the veins, genitals, teſticles, and the reins with Venus. Of ſickneſſes; the peſtilence, hot fevers, yellow jaundice, ſhingles, carbuncles, fiſtulas, choleric fluxes, fevers tertian and quotidian, all wounds, eſpecially in the face; and the epilepſy with the Moon and Mercury: alſo megrims, burning, ſcalding, ringworms, bliſters, frenzy-fury, hairbrains, ſudden diſtempers of the heart, the bloody flux, fiſtulas, diſeaſes in the genitals, ſtone in the reins and bladder, ſcars, pock-holes, hurts by iron and fire, the calenture, St. Anthony's fire, and all diſeaſes of choler and paſſion; he governs ſmelling alſo, which is hot and dry; ſo the attractive virtue. To which belong, arſeſmart, aſſarabecca, barberry-buſh, ſweet baſil, bramble-buſh, briony, brooklime, butcher's broom, broom, broom-rape, crowfoot, wake-robin, crane's bill, cotton-thiſtle, toad-flax, furze-buſh, garlic, hawthorn, hops, madder, maſterwort, muſtard, hedge-muſtard, nettles, onions, pepper-wort or dittander, carduus benedictus, radiſh, horſe-radiſh, rhubarb, rhaphontic, baſtard rhubarb, thiſtle, ſtar-thiſtle, tobacco, woolly thiſtle, treacle-muſtard, mithridate-muſtard, dyer's weed, and wormwood; as alſo birthwort, camelion thiſtle, cornel-tree, danewort, eſula, euphorbium, ſpearwort, hellebore, ſpurge-laurel, medlars, monk's hood, plantane, leeks, plumb-tree, oak-tree, tormentil, nettle, ſcammony, and all poiſonous things. 6. To Venus, which is a benevolent planet, nocturnal, feminine, moderately cold, a little more intenſely moiſt, a friend to the Sun, Mars, Mercury, and the Moon; an enemy to Saturn, and having an influence upon the genitals and urinary parts; as alſo upon the throat, women's breaſts, and milk therein; the loins, the liver, and ſperm with Jupiter, and the reins with Mars. Of ſickneſſes; all diſeaſes of the matrix, gonorrhea, flux of urine, priapiſm, weakneſs of the ſtomach and liver, French pox, flux of the bowels, and the menſtrual ſickneſs with the Moon: and all diſeaſes of the genitals, reins, and navel; and all diſeaſes by immoderate luſt, weakneſs in the act of generation, all ſorts of ruptures, all diſeaſes of the urine, and iliac paſſion; and governs the procreative virtue, and the feeling with Mercury, which is of all qualities. Under which are, alehoof or ground ivy, black alder-tree, apple-tree, ſtinking orach, archangel or dead nettles, beans, lady's bedſtraw, birch-tree, biſhop's-weed, blights, bugle, burdock, cherry-tree, winter-cherries, chickweed, chich-peaſe, clary, cock's-head, colts-foot, cowſlips, daiſies, devil's-bit, elder, dwarf elder, eringo, featherfew, fig-wort, filapendula, fox-gloves, golden-rod, gromewel, groundſel, herb robert, herb truelove, kidney-wort, lady's mantle, mallows, marſhmallows, mercury, mints, motherwort, mugwort, nep, parſnip, peach-tree, pear-tree, pennyroyal, periwinkle, plantane, plumb-tree, primroſes, ragwort, rocket, winter-rocket, damaſk-roſes, wood ſage, ſanicle, ſelf-heal, ſoapwort, ſorrel, wood-ſorrel, ſow-thiſtles, ſpignel, ſtrawberries, garden tanſy, wild tanſey or ſilverweed, teaſels, vervain, vine-tree, violets, wheat and yarrow; as alſo aſphodil, maiden-hair, coriander, ſowbread, figs, ground-ivy, flower-de-luce, all kinds of lilies, melilot, pomegranates, daffodil, ſtone-parſley, ſweet-peaſe, roſes, ſanders, ſatyrion, wild thyme, thyme, vervain, violet, laudanum, muſk, amber, and all kinds of perfumes. 7. To Mercury, which is a mutable planet, good with the good, and bad with the bad; hot with the hot, and cold with the cold; dry with the dry, and moiſt with the humid; a friend to Saturn, Jupiter, Venus, and the Moon, and an enemy to Mars and the Sun, repreſenting the lungs, which it doth ſympathetically ſtrengthen by its influences; yet ſome appropriate it to the middle of the belly; ſome ſay alſo that he rules the brain, eſpecially the imagination, hot and dry, tongue, hands, feet, and irrational parts, and that alone he maketh apprehenſive, deſirous of knowledge, and very fickle; as alſo that he governeth the ſpirits, memory, and brain, with the Sun and Moon. Of ſickneſſes; madneſs, loſs of the common ſenſes, doting, liſping, and ſtammering, coughs, hoarſeneſs, and the epilepſy with the Moon and Mars; almoſt all diſeaſes of the brain, as vertigoes, &c. all diſeaſes of the lungs, as aſthmas, phthyſics, &c. all imperfections of the tongue and memory, gout, ſtoppings of the head, dumbneſs, epidemical diſeaſes, and hurts of the intellect. Under it are, calamints or mountain-mint, carrots, carraways, dill, elecampane, fern, fennel, hog's fennel, germander, hazel-nut-tree, hoarhound, hound's-tongue, lavender, liquorice, wall-rue, maiden-hair, golden maiden-hair, ſweet-marjoram, melilot, money-wort, mulberry-tree, oats, parſley, cow parſnip, pellitory of the wall, chamepity or ground-pine, reſt-harrow or cammock, ſamphire, ſummer and winter ſavory, ſcabious, ſmallage, ſouthernwood, meadow trefoil, garden valerian, and honey ſuckles or woodbine; as alſo marſhmallows, aniſeſeed, columbine, daiſy, camomile, cubebs, beans, fumitory, walnut-tree, juniper-tree, mercury, navew, cinquefoil, ſtone-parſley, butterbur, burnet, peony, lungwort, elder, ſpeedwell, wild thyme, and colt's-foot. All which are ſaid to cure diſeaſes by ſympathy, ſo each planet cures its own: or antipathy, ſo the contrary. And are under the planets primarily and directly, or immediately, or ſecondarily, by the reſpective amity of the reſt. Note, That the ſolar plants have a good ſhape, yellow flower, good ſmell and taſte, and in open meridional places. The lunar are thick-leaved, juicy, wateriſh, ſweet-taſted, ſoon grow up, in wateriſh places. The Saturnine, ill-ſhaped, ill ſmell, binding taſte, lean, in filthy, woody, ſolitary, dark, places. The jovial, of good taſte and ſmell, red or ſky-coloured, oily ſubſtance, plain-leaved, in fat places. The martial, rough and prickly, reddiſh, of burning taſte, in dry places. The venereal, white-flowered, of clammy juice, of ſweet taſte, pleaſant ſmell, ſmooth-leaved, not laciniate. The mercurial, verticolor, flowered, codded, arenary.

II. To the ſigns, as followeth, amongſt which there are four degrees, after the manner of the four firſt qualities; ſo they are appropriate, 1. To Aries, which is a maſculine fiery ſign, or hot and dry, ſympathetical to the head. Some ſay it is eaſtern, maſculine, choleric, governeth the face, eyes, ears, &c. and whatever is above the firſt vertebra of the neck. Of ſickneſſes; the apoplexies, mania, ſpots and wounds in the face, abortiſements, and other impetuous diſeaſes; ringworms and morphews; alſo the ſmall-pox and meaſles, polypus, and all diſeaſes in the head. Thus in the firſt degree, red mug-wort, betony, ſuccory, larkſpur, danewort, mints, peach-kernels, butter-bur, wild thyme, colt's-foot, and fluellin; and are to be gathered in the end of dog-days, after the full of the Moon. In the ſecond degree, ſperage, St. John's-wort, milfoil, plantane, and peony; and are to be gathered the Sun and Moon being in Cancer. In the third degree, agaric, garden ſpurge, mezerion-tree, wild-gourds, ſpurge, colt's-foot, gentian, privet, nutmeg, palma Chriſti, elder, and ſarſaparilla; and are to be gathered betwixt St. James's and St. Lawrence's day. In the fourth degree, ſouthernwood, calamint, capers, cinnamon, white hellebore, marjoram, hoarhound, wild creſſes, roſemary, turbith, and ſpike; and are to be gathered partly in April, partly in September.

tember. 2. To Taurus, which is a terreſtrial feminine ſign, cold and dry, ſympathetic to the neck and throat. It is ſouth, feminine and melancholic, governing the voice, ſeven vertebræ of the neck, and the channel-bone. Of ſickneſſes; quinſies, ſcrophulas, catarrhs, and hoarſeneſs, and all diſeaſes incident to the throat. Thus in the firſt degree, betony, miltwaſte, ground ivy, the root of white lilies, mints, daffodil, polypody, roſes, roſemary, valerian, and violets; and mollify the tumours of the jaws and ſpleen. In the ſecond degree, maiden-hair, winter cherries, columbines, ivy, Solomon's ſeal, oak-tree; and miſletoe of the oak, and help wounds. In the third degree, bugloſs, our lady's thiſtle, hound's tongue, agimony, the leſſer dock, organy, ſtone-parſley, oak-tree, cinquefoil, ſanicle, figwort, tormentil, periwinkle, and ſilver weed; and are traumatic. In the fourth degree, mouſe-ear, great burdock, wild betony, great celandine, aſh-tree, mallows, lung-wort, ſcabious, and ground ivy; and have antipathy with the ſublunaries which are under Libra and Scorpio, but ſympathetic with thoſe that are under Cancer and Sagittarius. 3. To Gemini, which is a maſculine ſign, airy, but hot and moiſt, poſſeſſing the ſhoulders: it is weſt, maſculine, ſanguine, governing the arms and hands, with the parts belonging thereto. Of ſickneſſes; phlegmons, fellons, and others of blood there: and all ſuch diſeaſes as are incident to the hands, arms, and ſhoulders, really or by accident. Thus, in the firſt degree, aniſeſeed, marſhmallows, bugloſs, borage, fennel, hyſſop, ſtone-parſley, ſelf-heal, and wall-rue. In the ſecond degree, great burdock, bugloſs, fern, white-lime-tree, turnips, &c. In the third degree, chickweed, wake robin, mace, and dead nettle. In the fourth degree, ſorrel, germander, camomile, celandine, mugwort, and rhubarb; and they have an antipathy with the ſublunaries of Capricorn, and ſympathy with thoſe of Libra and Aquaries. 4. To Cancer, which is a feminine ſign, watery, cold, and moiſt, ſympathetic to the breaſt and lungs, as alſo to the ribs and ſpleen, and cureth the diſeaſes thereof. It is north, feminine and phlegmatic, governing the liver alſo. Of ſickneſſes; the alopecia, watery eyes, rheums, ſcabs, and the leproſy; as alſo all imperfections of the breaſt, ſtomach, and liver, and incident thereto. Thus, in the firſt degree, chickweed, cabbage, thiſtle, the flowers and fruits of beans, lady's bedſtraw, turnips, rampions, ſage, and figwort. In the ſecond degree, ſtrawberry-tree, cones of the fir-tree and pine, comfrey, nightſhade, turpentine, and miſletoe. In the third, brooklime, foxgloves, cudweed, ruſhes, creſſes, ſeed of ſtone-parſley, purſlain, willow-ſaxifrage, and ſtone-crop. In the fourth degree, water-lily, piony, houſeleek, and coral; and are antipathetic to the ſublunaries of Sagittarius, and ſympathetic to thoſe of Taurus and Libra. 5. To Leo, which is a maſculine ſign, fiery, or hot and dry, governing the heart and ſtomach. It is of the eaſt, maſculine, choleric, ruling the back, ſides, and midriff, with Virgo, and the twelve vertebræ of the breaſt, pericard and appetite. Of ſickneſſes; the cardiac paſſion, the trembling of the heart, and ſwooning; all diſeaſes thereof, and back, and all diſeaſes of choler and aduſtion. Thus, in the firſt degree, baſil, ſaffron, cypreſs-tree, carnations, hyſſop, lavender, water plantane, ſundew, ſea bindweed, and thyme. In the ſecond degree, wild angelica, tway-blade, centaury, galingale, gentian, and devil's bit. In the third degree, ſtinking May-weed, carrots, mints, garden creſſes, penny-royal, crowfoot, and nettles. In the fourth degree, birch-tree, box, broom, and bay-tree; the firſt are to be gathered the Sun being in Piſces, and the Moon in Cancer. The ſecond ſort in the beginning of May before ſun-riſing, or in the end of Auguſt; or the Sun being in Taurus, and the Moon in Gemini. The third, the Sun being in Leo, and the Moon in Virgo; and the laſt quadrature, or for refrigeration, the Sun being in Taurus, and the Moon in Gemini. The fourth, the Sun being in Piſces, and the Moon in Aquaries, or both. 6. To Virgo, which is a feminine ſign, earthy, cold, dry, and ſympathetic to the liver, inteſtines, and belly. It is ſouth, feminine, melancholic; governing the midriff with Leo, the navel, ſpleen, omentum, and all that belongeth to them. Of ſickneſſes; the cholic and iliac paſſion, oppilations of the ſpleen, and black jaundice; alſo all diſeaſes incident to the bowels, meſeraic veins, omentum, diaphragm, and ſpleen. Thus, in the firſt degree, ſorrel, wood-ſorrel, burdock, ſuccory, plantane, pear-tree, and wild ſage. In the ſecond degree, white beets, medlars, Solomon's ſeal, and briar-buſh. In the third, birthwort, bugle, fleabane, ſelf-heal, and oak-tree. In the fourth, carduus benedictus, ſmall centaury, black alder-tree, adder's tongue, ſloe-tree with all its parts, fruit and flowers, tormentil, and biſtort. 7. To Libra, which is a maſculine ſign, airy, hot, and moiſt, ſympathetic to the reins and bladder. It is weſt, maſculine, ſanguine: governing the navel and buttock with Scorpio. Of ſickneſſes; all filthy ſcabs and ſpots in the face, loſs of ſight, cankers, hemorrhoids, the leproſy, alopecia, and cholic; all diſeaſes of the reins, wind, and blood corrupted. Thus, in the firſt degree, all ſorts of daiſies, bugle, feverfew, cowſlips, goat's beard, and water parſnip. In the ſecond degree, marſhmallows, camomile, miſletoe, martagon, mallows, line-tree, vervain, and ſilver-weed. In the third degree, calve's ſnout, mugwort, nut-tree, and wall-rue. In the fourth degree, chickweed, great celandine, black mints, ſcabious, figwort, and houſeleek. 8. To Scorpio, which is a feminine ſign, watery, cold, and moiſt, and ſympathetic to the genitals. It is north, feminine, and phlegmatic, governing the fundament and bladder with Libra. Of ſickneſſes; the former and French pox, and all diſeaſes that infect the privities of both ſexes, and bladder. Thus, in the firſt degree, croſſwort, hawthorn, and ſervice-tree; as alſo all ſimples of the firſt degree of Cancer gathered in October. In the ſecond degree, aſh-tree, all ſorts of apples, and plumb-tree. In the third, barberry-tree, box, feverfew, and ſoapwort; hereto belong all herbs of the ſecond degree of Cancer. In the fourth, great red beets, mercury, daffodil, and ribes. 9. To Sagittarius, which is a maſculine ſign, hot and dry, ſympathetic to the loins, &c. It is eaſt, maſculine, choleric, governing the thighs and hips. Of ſickneſſes; hot fevers, blear eyes, and falls, and all diſeaſes in the thighs and hips. Thus, in the firſt degree, comfrey, onion, radiſh, figwort, flowers of line-tree, ſeſamum, and vervain. In the ſecond degree, garlic, wild angelica, henbane, lovage, and leaves of willow-tree. In the third degree, red beet, aſſarabecca, celandine, ſaffron, fern, ground-ivy, madder, devil's bit, and turmeric. In the fourth degree, gum-thiſtle, creſſes, and white vine. 10. To Capricorn, which is a feminine ſign, terreſtrial or earthy, cold and dry, ſympathetic to the knees and nerves. It is ſouth, feminine, melancholic, governing the hams, and what belongeth to them. Of ſickneſſes; achs in the knees, deafneſs, loſs of ſight and ſpeech, itch and ſcabs, and foulneſs of the ſkin; all diſeaſes in the knees and hams, and all diſeaſes of melancholy, and ſchirrhuſſes. Thus, in the firſt degree, marigold, black cherries, elecampane, mulberry-tree, bramble-buſh, and worts. In the ſecond degree, blackberries, mullein, and garden endive. In the third degree, acorus, wake-robin, ſhepherd's purſe, comfrey, gourds, galingale, garden mallows, and all kinds of ſow-thiſtles. In the fourth degree, hellebore, henbane, mandrake, monk's hood, herb truelove, ſavin, nightſhade, and ſtaves-acre. 11. To Aquaries, which is a maſculine ſign, aerious, hot, and moiſt, ſympathetic to the legs. It is weſt, maſculine, ſanguine, governing what belongs to the nerves. Of ſickneſſes; quartan fevers, the black jaundice, ſwellings of the legs, and varices; alſo all diſeaſes incident to the legs and ancles, all melancholy coagulated in the blood. Thus, in the firſt degree, angelica, wild carrot, fig-tree, flowers of the aſh-tree, ground ivy, walnut-tree, melilot, ſanicle, Solomon's ſeal, and periwinkle. In the ſecond degree, larkſpur, cummin, dodder of thyme, crane's bill, clotbur, roſe-root, wall-rue, wild ſage, and white nettle. In the third degree, agrimony, mouſe-ear, clary, mercury, ſaxifrage, and dragon. In the fourth degree, the leaves of aſſarabecca, motherwort, hemlock, and medlars. 12. To Piſces, which is a feminine ſign, aqueous, cold and moiſt, and ſympathetic to the feet. It is north, feminine, phlegmatic, governing all that belongs to the feet. Of ſickneſſes; gouts, ſcabs, the leproſy and palſy, lameneſs, kibes, diſeaſes incident to the feet; all diſeaſes of ſalt phlegm, mixed with humours; the ſmall pox, meaſles, and all cold and moiſt diſeaſes. Thus, in the firſt degree, long birthwort, cabbage,

bage, gourds, elecampane, myrobolans, navew, water-lily, purſlain, and turnips. In the ſecond degree, artichokes, calves ſnout, blue-bottle, and golden flower gentle. In the third degree, nigella, garden and wild poppy, and ſow-thiſtle. In the fourth degree, hemlock, henbane, monk's hood, horned poppy, and white nightſhade.

Here let it be remembered, that in all theſe the ſympathy and antipathy of the ſigns and planets are to be obſerved; both eſſential, by houſe and exaltation, temperature, or quality, or conditions; or elſe accidental, by configurations; of which ſome are obnoxious and hateful, as a quartile and oppoſition; as alſo the conjunction of bad planets: others are healthful, as a ſextile and trine, and the conjunction of good planets. Next conſider what diſeaſes every planet cauſeth diſtinctly of himſelf, and what under the ſigns of the zodiac; what parts the planets generally rule, and what of the ſigns they are under, and houſes of the heaven in a celeſtial ſcheme; and what part each planet particularly rules, according to his tranſit through his ſign. Then may the nature and kind of the diſeaſe be found out by the figure of the decumbiture. 1. By the houſes of heaven; of which, the ſixth, ſeventh, and twelfth, ſignify diſeaſes. 2. By the nature of the ſigns; as, fiery, earthy, airy, and watery. 3. By the planets, and their aſpects. The part may be found out by conſidering the government of the ſign; and maſculine planets ſignify the right ſide, and the feminine the left, and afflict where ruling. As for the length of the diſeaſe, it may be found out by the nature of the planets, as followeth: Saturn cauſeth long ſickneſſes; the Sun and Jupiter, ſhort; Mars, ſhorter, but acute; Venus, mean; Mercury, inconſtant, as aſpected; the Moon gives ſuch as often return. Whether it ſhall end by life or death, well or ill, may be conjectured from aſpects. The ſun giveth vital heat to the creation, the Moon giveth radical moiſture, Saturn fixeth and putrifieth this, Jupiter turneth it into nouriſhment, Mars calcines it, Venus makes it fruitful, and Mercury makes it rational. As for elements, the fire preſerves the earth, that it be not drowned or deſtroyed by a continual flux of water upon it; the air preſerves the fire, that it be not extinguiſhed; the water preſerves the earth, that it be not burned; and the earth is the decoction of all. The air and fire, are thin and active; water and earth, thick and paſſive, with a proportionable difference: or, as others ſay, air hath motion, thinneſs, and darkneſs; fire hath the two firſt, and brightneſs; water hath motion, darkneſs, and thickneſs; the earth hath the two laſt, and quietneſs. Alſo the Sun is chief in chronical diſeaſes; and the Moon in the acute with the aſcendant. The occult qualities are found out by peiralogy, or experience, which is more ſure and ſafe.

II. Next follow thoſe things which are more remote, that concern plants and other medicinals, as commonly to be compounded therewith. As, 1. The topology, or place of gathering them; thus, 1. Herbs are to be gathered in mountains, hills, and plain places; in thoſe that are higheſt eſpecially, and expoſed to the ſun, and winds; except ſome few, as germander and ground pine, which are more odoriferous and frequent on hills: but thoſe that grow only in plain places are to be gathered in more dry places, and more remote from lakes and rivers, except they delight in more moiſture, as water-caltrops, water-lilies, &c. 2. Flowers are to be gathered in thoſe places in which there are the beſt plants. 3. So fruits. 4. And ſeeds. 5. So roots alſo. 6. Woods are to be taken from trees where they are well grown. 7. Barks, where their plants are beſt. 8. Juices are to be taken from the beſt herbs, chiefly the well grown and greater, as being leſs excrementitious, and that before they grow woody and rotten. 9. Liquors and gums, &c. are to be taken from mature ſtalks, which are the beſt in their kind, as the reſt. 2. The chronology or time. Thus, 1. Herbs are to be gathered in the time of their flouriſhing, and beginning to go to ſeed; which is for the moſt part in July, if they are to be kept, and that at noon in a clear day; being ſome conſiderable time or certain days before freed from ſhowers, and not too dewy, or ſcorched by too much heat of the ſun, which is chiefly in the ſpring or beginning of ſummer. But thoſe which grow green all the year in gardens may be gathered at any time; and thoſe that have neither ſtalk, flower, nor ſeed, as maiden-hair, ſpleenwort, &c. are to be gathered in the vigour of their leaves, i. e. when they are moſt green and greateſt; yet ſome, becauſe while they flower or bear ſeed they are woody and dry, are to be gathered before that time, as ſuccory, beet, &c. 2. Flowers, in the vigour of their maturity, when opened (except the roſe) at noon in fair weather, after the ſun hath taken off the dew, and before they wither or fall off, which for the moſt part is in ſpring. 3. Fruits, when they are ripe, and before they wither. 4. Seeds, out of fruits thorough ripe, when they begin to be dry, and before they fall off; and out of plants when dry and no longer green, as in the ſummer, i. e. June or July. 5. The juice of plants is to be preſſed out whilſt they are green, and their leaves yet tender, and eſpecially out of the well-grown and greater. 6. The barks of fruits are to be taken when the fruits are full ripe, and thoſe of roots when the herbs have loſt their leaves, but thoſe of trees when they are in their vigour. 7. Woods, when the trees are full grown. 8. Liquors and gums, &c. are taken by opening the ſtalk in the vigour thereof, and gums when congealed and mature. 9. Roots, when the fruit is fallen off, and the leaves alſo begin, which for the moſt part is in autumn, and are to be dug up in fair weather; which is neceſſary always

ways to be obſerved: as alſo (according to ſome) the decreaſing of the moon, the day of decreaſing, and the morning, that time being balſamical: as alſo the fortitude of the planet familiar to the thing to be gathered, and the ſign of the zodiac. 3. The dropology, or manner of gathering them; as ſome affirm, ſome plants having diverſe faculties, according to the diverſe manner of gathering them, as upwards or downwards; ſo hellebore, the leaves drawing the humours upwards or downwards accordingly: ſo the root of elder alſo, and the buds, which, being gathered upwards, cauſe vomiting, and purge if downwards: alſo ſome obſerve the ſcite of the regent planets, as whether they are oriental or occidental, &c. 4. The paraſceuology, or manner of preparing them for aſſervation. Thus, 1. Flowers, are kept for the moſt part ſeparated from the ſtalks and leaves. 2. Herbs or leaves, if they are greater, and have more thick ſtalks, they are kept apart from them; but, if more ſlender, they are kept together, and ſometimes with the flowers. 3. Fruits, as apples, &c. are to be placed with their ſtalks downwards, and laſt longer if laid on a heap of barley. 4. Roots, ſome are kept whole, as thoſe of birthwort, gentian, hermodactils, ſatyrion, &c. others are diſſected, as thoſe of briony, elecampane, flower-de-luce, &c. alſo ſome have the woody matter taken away, as thoſe of fennel, ſtone-parſley, &c. 5. The phylacology, or way and place of keeping them; which in general ought to be pure, convenient, high, dry, open, of a north or ſouth ſituation, where they may not be burnt by the ſun, or moiſtened by the walls, &c. more particularly: as, 1. Flowers, are to be dried in the ſhade, and then they (eſpecially thoſe of good odour) are to be kept in teile caſkets. 2. Herbs, are to be dried in the ſhade, except thoſe that have thicker ſtalks, and moiſter leaves, and ſo ſubject to putrefaction, which muſt therefore be dried by the more intenſe heat of the ſun, or ſome other way; and, when they are well dried, they are to be kept in linen bags, or, which is better, in wooden caſkets, that they may be defended from duſt. 3. Seeds, are to be kept in a dry place, and in a wooden or glazed veſſel, being wrapped up in papers, that they may laſt the longer, and without impurity. 4. Fruits, in boxes, panniers, or ſcuttles. 5. Gums and dry roſins, in a dry place, and in wooden veſſels, but the more liquid in pitchers. 6. Barks, in wooden coffers, and a dry place. 7. Roots, in a dry air, and the ſmaller and more thin (whoſe virtues may be eaſily diſſipated by the heat of fire or the ſun) are to be dried in the ſhade and wind, as thoſe of parſley, fennel, &c. but the more groſs by the ſun or wind, as thoſe of briony, gentian, mandrake, and rhubarb. 6. The monology, or duration of them. Where note, the time of keeping them muſt not exceed that of their duration, which is diverſe, according to the greater or ſmaller ſolidity of the ſubſtance, by which they are more or leſs ſubject to diſſipation. In particular; 1. Vegetables; as, 1. Flowers may be kept ſo long as they retain their colour, ſmell, and taſte, which for the moſt part is half a year; therefore they are to be changed every year. Note alſo, they are beſt when freſheſt. 2. Herbs may be kept longer, yet it is better to change them yearly. 3. Seeds, by how much they are more hot, ſharp, and aromatical, by ſo much alſo are they more durable, therefore may be kept two or three years; but thoſe that are ſmaller and colder muſt be changed every year, and muſt be kept carefully, leſt they grow mouldy. 4. Fruits muſt be changed every year; but the exotic, that have a harder bark or ſhell, &c. may be kept two or three years. 5. Gums and roſins are more durable. 6. Barks laſt a year or more. 7. Roots, if they are little, ſlender, and thin, are changed every year; as thoſe of aſſarabecca, ſperage, &c. but the greater, and having a groſs ſubſtance, laſt two or three years; as thoſe of birthwort, briony, gentian, rhubarb, and hellebore, &c.

Thus far we have conſidered the faculties of medicinals; now follow thoſe of aliments, which are ſuch vegetables, &c. as nouriſh and increaſe the bodily ſubſtance, by reſtoring that which is deperdite, the body being in a perpetual decay, and therefore wanting refection by meat and drink; and this, if it do not greatly affect the body by any other quality, is properly and ſimply called aliment, and is in ſome meaſure like unto the ſubſtance of the body into which it is to be converted; but, if it change the body by any exuperant quality, it is not ſimply aliment, but medicamentous: ſuch are thoſe things, which with ſweetneſs have adjoined an acid, acerb, bitter, or ſharp, quality; and from hence ariſeth the difference of aliments; which, 1. In reſpect of ſubſtance, are hard and ſoft; heavy, viſcid, or light; firm or infirm; eaſily or hardly concocted or corrupted. 2. In reſpect of quality, they are hot, cold, moiſt, or dry; ſweet or bitter; ſour, ſalt, ſharp, acid, acerb, or auſtere; of good or bad juice; ſimple or medicamentous; wholeſome or unwholeſome; beſt or worſt; of which ſome are, 1. Euchymic, or of good juice, ſweet in taſte, agreeable to the palate, and not of any unpleaſant ſmell; as alſo fat things, and ſome of which are inſipid, as bread of the beſt wheat, &c. 3. Cacochymic, or of evil juice, which, beſides ſweetneſs, have ſome other quality mixed therewith, as ſharpneſs, bitterneſs, ſaltneſs, acerbity, and too much acidity; alſo all fetid things, of an unpleaſant ſmell, and corrupted; as the oleraceous, (eſpecially the wild,) except lettuce and ſuccory, cucumbers, corrupt corn, things growing in cenoſe and dirty places, as alſo thick, auſtere, and acid; beer made of bad grain, &c. and ſome of theſe ingender, 1. A cold, pituitous, and crude, juice, as the haſty fruits and cold herbs. 2. But others, a hot and bilious, as all things that have acrimony, ſo garlic, onions, leeks, wake-robin, creſſes, muſtard, &c. 3. And ſome melancholic, as pulſes, eſpecially lentils, and cabbage. 3. Of groſs nouriſhment, as thoſe things which have a ſtrong and hard ſubſtance, as bread baked under aſhes, and whatſoever is made of meal without leaven; cheſnuts, acorns, frogſtools, thick, ſweet, and black, wine and ale; alſo whatſoever is viſcid and glutinous, and are to be ſhunned by all that live at eaſe, and uſe no exerciſe before meat; but thoſe are the beſt for diet that are in a mean between incraſſating and attenuating. 4. Of thin juice, as things which are not tough or viſcid, and have not a ſtrong ſubſtance, but thin and friable, eſpecially if joined with acrimony; as garlic, onions, leeks, hyſſop, organy, ſavory, bread of wheat well fermented and twice baked, bitter almonds, peaches, and thin white wines; theſe alſo open the paſſages, clean away what is viſcous, incide and extenuate what is groſs; but are to be ſhunned by thoſe who are of a choleric temperature; the long uſe of them cauſing bilious and ſerous excrements, yet are agreeable to thoſe whoſe body and veins are full of a crude, pituitous and melancholic, juice. Here note, an attenuating diet differeth from a ſlender one, the laſt prefixing a mode in the quantity, and the other being ſo called by reaſon of the tenuity of the alimentary juice. Eupeptic or of eaſy concoction, as things which have not a ſolid firm ſubſtance, but are either rare or eaſily reſoluble, concocted, or corrupted, as moſt fruits and things oleraceous; but theſe, as they are quickly and eaſily concocted, ſo alſo are they eaſily altered and corrupted: for, if taken into a ſtomach whoſe heat is ſharp, biting, and febriculous, or into which ſome bilious humour doth flow, they are not turned into aliment, but ſome evil humour; but thoſe things that are not eaſily concocted are alſo neither altered nor corrupted. 6. Diſpeptic, or of hard concoction, as all things of a ſolid ſubſtance and thick juice; as unleavened bread, cabbage, dates, cheſnuts, unripe ſervices, acorns, and acid wines. Theſe, if taken into a hot ſtomach, are ſooner concocted than if into a mean; and, in a weak and cold one, they are either concocted not at all, or very ſlowly.

An experiment of all theſe may be made by decoction in water. For the liquor, if ſweet, ſheweth the thing to be of good juice; if thick, of groſs juice; if thin, of little; if well boiled, of much nouriſhment; if ſlowly boiled, not eaſily altered in the ſtomach, and ſo the contrary. Alſo ſome are, 1. Flatulent, of cold unconcocted humidity; as all fruits early ripe, eſpecially if eaten raw, ciches, and lupines; alſo whatſoever is ſweet with auſterity, which, by reaſon they cannot be eaſily diſtributed and remain long in the ſtomach, cauſe flatulency, as muſt, new beer, &c. 2. Without wind, of eaſy elixation, as things well boiled, leavened bread made of good wheat and well baked, and old wine. 3. Eaſily deſcending, acid, ſalt, inſipid, or excrementitious; as things full of humidity, participating of a certain acrimony or ſaltneſs without acerbity; or are inſipid, as mallows, orach, mercury, marigolds, &c. and things full of execrements, as brown bread, and whatſoever is full of bran, and broths. 4. Slowly, as things dry and binding, having little humidity; as dry meats, fine bread, things having a little aſtriction; as pears, ſervices, black wines, or red, but ſooner the auſtere. Thus of the definition of phytology and its parts. 1. Therapeutic, or curatory. 2. Threptic, or alimentary; in both which vegetables are conſidered; 1. According to their ſubſtance, as of thick or thin ſubſtance or conſiſtence, looſe or cloſe, glutinous or crumbling, heavy or light. 2. According to their accidents; and 1. as medicamentary, 1. according to their more immediate accidents. 1. The qualities; as the firſt, heat, coldneſs, moiſture, and drineſs, with their degree, ſenſible, manifeſt, vehement, or moſt violent. The ſecond, mollifying, hardening, rarefying, condenſing, opening, binding, drawing, repelling, cleanſing, purging, attenuating, clamming, obſtructing, eaſing pain, ſtupefying, reddening, putrefying, and burning. The third, ſuppurating, incarning, conglutinating, cicatrizing, generating callus, provoking urine, breaking the ſtone, provoking the terms, expectorating, and generating milk and ſperm, cauſing ſweat, ſneezing, beauty, killing worms, and phlegmatizing. The fourth occult, reſiſting poiſon, ſpecific, and purging. 2. The way of finding out theſe qualities: 1. The manifeſt, 1. by reaſon, as by the ſmell, colour; as white, black, green, and yellow; &c. Taſtes; as bitter, ſharp, acid, nitrous, ſalt, ſweet, acerb, auſtere, oleous, aquinſipid or wateriſh, earthy, woodiſh, and corn-like. Touch; as thick, thin, cloſe, hollow, hard, ſoft, heavy, light, clammy, dry, rough, ſmooth; mutability, age, places, and operation of the four firſt qualities. 2. By experience, conſidering, *quid in quo, quomodo*. 2. The occult, 1. By ſignature. 1. External, in colour, form, property. 2. Internal, as appropriated, 1. To the planets, as to the Sun, Moon, Saturn, Jupiter, Mars, Venus, Mercury. 2. To the ſigns, as to Aries, Taurus, Gemini, Cancer, Leo, Virgo, Libra, Scorpio, Sagittarius, Capricorn, Aquaries, and Piſces. 2. By experience, according to the more remote accidents, as the place of gathering them, the time and manner, the way of preparing them for keeping, and place thereof; their duration, diſcrimination, place in receipts, with their compoſitions and way of making them; their doſes, as ingredients and compounded; their uſe, and ſeaſon and manner of uſing them, &c. II. As alimentary, and ſo as of good or bad juice, of thick or thin juice, of eaſy or hard concoction, windy, or without wind, eaſily or ſlowly deſcending, &c.

Now follow the differences of vegetables, and, in general, I. External. 1. Of Trees, which are, 1. rhodoflory, or roſe-flowered, as the roſe, holy roſe, and ciſtus ledon, &c. 2. Pomiferous, or apple-bearing; as the apple-tree, quince-tree, citron-tree, orange-tree, pomegranate-tree, pear-tree, fig-tree, ſycamore-tree, mulberry-tree, ſtrawberry-tree, medlar-tree, ſervice-tree, peach-tree, apricot-tree, plumb-tree, myrobolans-tree, ſebeſten-tree, jujube-tree, cornel-tree, nettle-tree, cherry-tree, pock-wood-tree, and eben-tree. 3. Nuciferous, or nut-bearing; as the almond-tree, walnut-tree, filbert-tree, nut-tree, cheſnut-tree, phiſtic-tree, oily-acorn-tree, ſtorax-tree, and exotic-nut-tree. 4. Dactyliferous, as the palm-tree, bearing dates. 5. Glandiferous, or maſt-bearing; as the beech-tree, oak-tree, cork-oak-tree, Arabian bindweed and oak-tree, miſletoe, gall-tree, and uva-quercina. 6. Bacciferous, or berry-bearing; as the ſaunders-tree, maſtic-tree, frankincenſe-tree, turpentine-tree, balſam-tree, ſhumach-tree, ſcarlet-oak-tree, aſh-tree, holly-tree, line-tree, wayfaring-tree, oſtrys, cotton-tree, maple-tree, plain-tree, ague-tree, great ſpurge-tree, barberry-tree, gooſeberry-tree, elder-tree, laurel, bay-tree, mezereon-tree, mountain widdow-wail, rockroſe, myrtle-tree, butcher's broom, cloudberry-tree, box-tree, olive-tree, chaſte-tree, privet, mock privet, buckthorn, boxthorn, bramble, caper-tree, ſavin, cedar-tree, cypreſs-tree, juniper-tree, yew-tree, dragon-tree, ſperage. 7. Aromatiferous, or ſpice-bearing, as the nutmeg and mace tree, pudding-pipe-tree, cinnamon-tree, Indian leaf, clove-tree, pepper-tree, cubeb-tree, cloveberry-tree, cardamom-tree, and aloe-tree. 8. Coniferous, or cone-bearing, like pine-apples; as the coniferous cedar, pine-tree, larch-tree, pitch-tree, and fir-tree. 9. Juliferous, or wool-bearing, as the willow-tree, alder-tree, elm-tree, and poplar-tree. 10. Siliquate; or codded; as the ſhrub trefoil, bean trefoil, Egyptian thorn, roſewood-tree, broom, furze, baſtard ſenna, ſenna, ſpindle-tree, and roſebay. 11. Scopary, as the tamariſk-tree, and heath, &c. 12. Succiferous, or juice-yielding; as the ammoniac-tree, metopion, acacia, manna-tree or aſh, gamandra-tree or Indian great ſpurge-tree. 13. Gummiferous, or gum-bearing; as the gum-arabic-tree, or Egyptian thorn, ſorcocol-tree, ivy-tree, caucomum-tree, lacca-tree, dragon-tree, camphire-tree, juniper-tree, cherry-tree, plumb-tree, goat's thorn yielding tragacantha, elm-tree, &c. 14. Reſiniferous, or roſin-yielding; as the turpentine-tree, larch-tree, maſtic-tree, frankincenſe-tree, myrrh-tree, ſtorax-tree, liquid amber-tree or ocoſoti, bdellium-tree, benjamin-tree, tacamahaca-tree, gum-elemi-tree, colophony-tree, or fir-tree, and pitch-tree.

2. Of Herbs, which differ in reſpect of, I. Roots, and ſo they are, 1. Bulbous, or round rooted; as the bulbous flower-de-luce, wallflowers, ſaffron, meadow-ſaffron, onions, leeks, ſquills, garlic, moly, dog-ſtones, and ſatyrion, &c. 2. Not bulbous,

as moſt other plants. II. The leaves, and ſo they are, 1. Longicautifolious, or long ſtalk leaved; as graſs, ruſhes, nard, galingal, horſetail, reed, paper-reed, ſtinking-gladden, flower-de-luce, aromatical reed, ginger, zedoary, and coſtus, &c. 2. Craſſifolious, or thick-leaved; as houſeleek, Venus's navelwort, aloes, roſe-root, orpin, purſlain, ſamphire, and glaſſwort. 3. Hirtifolious, or rough-leaved; as borage, gromel, hound's tongue, and mullein. 4. Nervifolious, or nerve-leaved; as gentian, plantane, fleawort, biſtort, pondweed, water-lilies, wake-robin, and hellebore, &c. 5. Rotundifolious, or round-leaved; as birthwort, colt's foot, butterbur, bur, and aſarum. 6. Mollifolious, or ſoft-leaved: as marſhmallows, mercury, and rhubarb, &c. 7. Trifolious, and pentaphils, &c. 8. Capillary, or hair-like; as hart's tongue, moonſern, ſpleenwort, moonwort, maiden-hair, ſundew, fern, and polypody, &c. 9. Spinoſe, or prickly; as thiſtles, teaſels, ſea-holly, gum thiſtle, and goat's thorn, &c. III. The flowers, and ſo they are, 1. Verticillate and galeate, or turned and helmet-like; as mints, calamint, organy, penny-royal, hyſſop, thyme, Arabian ſticadove, lavender, ſpike, ground-pine, oak of Jeruſalem, ſage, nettles, betony, eyebright, figwort, ſelf-heal, hedge-hyſſop, and dittany, &c. 2. Stellate, or ſtar-like; as madder, lady's bedſtraw, croſſwort, and rue. 3. Calcariflorous, or ſpur-flowered; as columbine, larkſpur, toad-flax, &c. 4. Umbelliferous, or boſſed; as cummin, fennel, dill, pellitory of Spain, fennel giant, ſcorching fennel, turbith, ſow-fennel, bee's-neſt, chervil, parſley, angelica, maſterwort, laſarwort, alheal, carraway, coriander, aniſeſeed, burnet, cicely, hemlock, and dropwort. 5. Corimboide, ring or hook like; as elecampane, pellitory of Spain, mugwort, ſneeſewort, and wormwood. 6. Capitate, or headed; as ſcabious, knapweed, blue-bottle, viper's graſs, marigold, devil's bit, and thiſtles, &c. IV. The fruits, and ſo they are; 1. Pomiferous, or apple-bearing; as mandrakes, cucumbers, melons, pompions, citruls, gourds, and wild cucumbers, &c. 2. Capſuliferous, or coffer-bearing; as garden creſſes, ſhepherd's pouch, ſcurvy-graſs, and horſe-radiſh, &c. 3. Vaſculiferous, or veſſel-bearing; as centaury the leſs, mouſe-ear, flax, St. John's-wort, pimpernel, moneywort, rupturewort, and poppy, &c. Siliquate, or codded; as the leguminoſe, and oleraceous, honeyſuckle, bird's foot, milkwort, cock's head, goat's rue, liquorice, fumitory, celandine, columbine, and nigella. V. The place, and ſo they are, garden, wild, field, mountain, meadow, or aquatic; as moſs, duck's meat, tree-lungwort, ſea-nettle, wrack, arſeſmart, pimpernel, &c. VI. The manner of growing, and ſo they are, convolvulous, or climbing; as the pomiferous and leguminous, ſcammony, ſea-bindweed, ſarſaparilla, china, briony, mechoacan, hops, vine, lily of the vale, ivy, Indian-creſſes, birthwort, ſow-bread, parnaſſus-graſs, and ſaxifrage, &c. VII. Succiferous, or juice-yielding; as the lactiferous, viz. ſpurge and chameſyce, &c. Galbaniferous and ſagapeniferous; fennel giant, apopanax plant, or Hercules's alheal, black poppy yielding opium, aloes, ſcammony, wild cucumber yielding elaterium, euphorbium or gum-thiſtle, liquorice, ſugar-reed. VIII. As gummiferous, or gum-bearing; as laſarwort bearing aſafœtida.

II. Internal, in reſpect of their uſe and virtues, or as alimentary, and medicinal. Of their uſe, or as dietetical; and ſo they are, 1. Frumentary, ſerving as bread corn; wheat, rye, ſpelt corn, barley, oats, rice, Turkey corn, millet, panic, burnt corn, and phalaris. 2. Leguminary, ſerving as pulſe; as beans, peaſe, lentils, ciches, cichling, vetches, bitter vetches, lupines, kidney beans, winged wild peaſe, and fenugreek. 3. Oleraceous, ſerving as pot-herbs, ſallads, &c. and are, 1. Roots, as onions, garlic, leeks, radiſh, wild radiſh, turnips, navew, parſnips, carrots, red beets. 2. Leaves, as of lettuce, ſuccory, cabbages, ſpinage, orach, beets, aſparagus, creſſes, muſtard-ſeed, blites, hops, and ſtone-parſley. 3. Fruits, as artichokes, gourds, cucumbers, melons, ſtrawberries, capers; and thoſe of trees, as apples, quinces, oranges, lemons, pears, medlars, figs, peaches, apricots, plumbs, cherries, mulberries, grapes, olives, almonds, cheſnuts, walnuts, filberts, and fungi. 4. Condimentary, ſerving as ſauce; as pepper, ginger, cloves, cinnamon, cardamums, nutmeg, mace, ſaffron, elder, capers, creſſes, onions, garlic, &c. Sugar, oil, and vinegar, &c. The qualities of which, ſee in my Iſagoge Zoologice-mineralogica, they being there mentioned for ſauces. 2. Of their virtues, or as pharmaceutical, in reſpect of their ſeveral parts and qualities, firſt, ſecond, third, and fourth.

I. Roots; are, 1. Temperate, as bear's breech, eringo, garden parſnips, ſalop, mallows, mechoacan, aſparagus, cinquefoil, lady's thiſtle, and tormentil. 2. Hot, and ſo, in the firſt degree, as baſil, burdocks, borage, bugloſs, avens, aromatical reed, china, dog's graſs, liquorice, knee-holly, mallows, marſhmallows, pilewort, piony, poppy, ſparling, parſley, wild parſnips, ſelf-heal, ſatyrion, ſkirrets, ſcorzonera, valerian great and ſmall, and white lilies. In the ſecond, as aſphodil male, carline thiſtle, cypreſs long and round, butterbur, devil's bit, hog's fennel, loveage, fennel, mercury, reeds, ſwallow-wort, ſpignel, ſarſaparilla, ſquills, waterflag, and zedoary. In the third, as angelica, avon, aſſarabecca, elecampane, birthwort long and round, briony white and black, celandine, doronicum, filapendula, ginger, ſtinking gladden, galingal greater and leſs, hellebore white and black, maſterwort, orris Engliſh and Florentine, reſtharrow, ſowbread, ſnakeroot, virginian turbith, turmeric, and white dittany. In the fourth, as garlic, leeks, onions, and pellitory of Spain. 3. Cold, and ſo, in the firſt degree, as beets white and red, comfrey great, madder, plantane, roſeroot, and ſorrel, In the ſecond, as alkanet, daiſies, endive, hyacinth, hound's tongue, and ſuccory. In the third, as biſtort, and mandrakes. In the fourth, as henbane. 4. Dry, and ſo, in the firſt degree, as aromatical reed, bear's breech, burdock, red beets, endive, eringo, hyacinth, knee-holy, madder, pilewort, and ſelf-heal. In the ſecond, as alkanet, male aſphodil, avens, baſil, butterbur, cypreſs long and round, devil's bit, fennel, hound's-tongue, lady's thiſtle, lovage, marſhmallows, mercury, reeds, parſley, plantane, ſmallage, ſorrel, ſwallow-wort, ſpatling poppy, ſuccory, ſpignel, thiſtles, valerian, waterflag, and zedoary. In the third, as angelica, aron, aſarabecca, elecampane, birthwort long and round, biſtort, white and black briony, carline thiſtle, china, cinquefoil, white dittany, doronicum, filapendula, greater and leſs galingal, ſtinking gladden, ginger, white and black hellebore, hog's fennel, maſter wort, orris Engliſh and Florentine, peony male and female, reſtharrow, ſowbread, celandine, ſarſaparilla, and virginian ſnakeroot. In the fourth, as coſtus, garlic, onions, leeks, and pellitory of Spain. 5. Moiſt, ſuch are baſil, white beets, borrage, bugloſs, dog's graſs, daiſies, liquorice, mallows, parſnips, ſpatling poppy, ſatyrion, ſcorzonera, ſkirrets, valerian. 2. As for the ſecond qualities, they are, 1. mollifying, as mallows, white lilies, and marſhmallows. 2. Opening, as aſarabecca, bruſcus, carline thiſtle, endive, filapendula, fennel-garlic, gentian, leeks, onions, parſley, raphontic, ſuccory, aſparagus, ſmallage, turmeric. 3. Binding, as alkanet, biſtort, bear's-breech, cypreſs, cinquefoil, tormentil, toothwort, and waterflag. 4. Cleanſing, as aron, aſphodil, birthwort, graſs, aſparagus, and celandine. 4. Extenuating, as capers, and orris Engliſh and Florentine. 6. Anodyne, as eringo, orris, reſtharrow, and waterflag. 7. Helping burnings, as aſphodil, hyacinths, white lilies. 8. Burning, as garlic, onions, and pellitory of Spain. 9. Diſcuſſing, as aſphodil, birthwort, briony, and capers. 10. Expelling wind, as coſtus, galingal, fennel, hog's fennel, parſley, ſmallage, ſpikenard Indian and Celtic, waterflag, and zedoary. 3. As for the third qualities, they are, 1. Suppurating, as briony, marſhmallows, and white lilies. 2. Glutinating, as birthwort, comfrey, daiſies, gentian, and Solomon's ſeal. 3. Spermatogenetic, as eringo, galingal, ſatyrion, and waterflag. 4. Emmenonagogic, as aſarabecca, aron, aſphodil, birthwort, centaury the leſs, long and round cypreſs, coſtus, capers, calamus aromaticus, carrots, white dittany, dittany of Crete, eringo, fennel, garlic, graſs, knee-holy, peony, valerian, waterflag, parſley, ſmallage. 5. Stopping the terms, as biſtort, comfrey, tormentil. 6. Hydrotic, as carline thiſtle, china, and ſarſaparilla. 4. As for the fourth qualities, they are, 1. Alexipharmic, as angelica, long birthwort, biſtort, bugloſs, coſtus, cypreſs, carline thiſtle, doronicum, elecampane, garlic, gentian, ſwallow-wort, ſmallage, tormentil, viper's bugloſs, and zedoary. 2. Cathartics, as 1. Purgers of choler, as aſarabecca, fern, rhubarb, rhaphontic. 2. Of melancholy, as white and black hellebore, and polypody. 3. Of phlegm and water, as aſphodil male, white and black briony, wild cucumbers, elder, hermodactils, jallop, mechoacan, ſquills, ſowbread, ſpurge great and ſmall, and turbith. 3. Appropriate, and ſo, 1. They heat; 1. The head, as doronicum, fennel, jallop, mechoacan, peony male and female, and Celtic and Indian ſpikenard. 2. The neck and throat, as devil's bit, and pilewort. 3. Breaſt and lungs, as birthwort long and round, calamus aromaticus, cinquefoil, elecampane, liquorice, orris Engliſh and Florentine, and ſquills. 4. The heart, as angelica, borrage, bugloſs, butterbur, baſil, carline thiſtle, doronicum, ſcorzonera, tormentil, valerian white and red, and zedoary. 5. The ſtomach, as avens, fennel, galingal greater or leſs, ginger, radiſh, and ſpikenard Celtic and Indian, and elecampane. 6. The bowels, as ginger, valerian great and ſmall, and zedoary. 7. The liver, as carline thiſtle, china, dog's-graſs, fennel, gentian, knee-holly parſley, rhubarb, rhaphontic, celandine, ſmallage, cinquefoil, aſparagus, and turmeric. 8. The ſpleen, as aſh, birthwort round, carline thiſtle, capers, fern male and female, fennel, gentian, parſley, aſpargus, and waterflag. 9. The reins and bladder, as baſil, burdock, carline thiſtle, china, cypreſs long and round, dropwort, knee-holly, marſhmallows, parſley, ſmallage, ſperage, ſpatling poppy, ſpikenard Celtic and Indian, ſaxifrage white, and valerian. 10. The womb, as birthwort long and round, galingal greater and ſmaller, hog's fennel, and peony male and female. 11. The fundament, as pilewort. 12. The joints, as bear's breech, coſtus, ginger, hermodactils, jallop, and mechoacan. 2. They cool, 1. the head, as roſe-root. 2. The ſtomach, as biſtort, endive, ſuccory, and ſow-thiſtles. 3. The liver, as endive, madder, and ſuccory.

II. Barks, are 1. hot, and ſo in the firſt degree; as citrons, lemons, oranges, pockwood, and tamariſk. In the ſecond, as capers, cinnamon common and winter, caſſia lignea, and frankincenſe. In the third, as mace. 2. Cold, and ſo in the firſt degree, as oak and pomegranates. In the third, as mandrakes. 2. As for the fourth qualities, they are, 1. cathartic; as, 1. purgers of choler, as barberries. 2. Of phlegm, and water, as elder, dwarf-elder, laurel, and ſpurge. 2. Appropriate; and ſo, 1. They heat, 1. the head, as winter-cinnamon. 2. The heart, as cinnamon, caſſia lignea, cinnamon, citrons, lemons, mace, and walnuts. 3. The ſtomach, as caſſia lignea, cinnamon, citrons, lemons, oranges, and ſaſſafras. 4. The lungs, as caſſia lignea, cinnamon, and walnuts. 5. The liver, as barberries, bays, and winter-cinnamon. 6. The ſpleen, as aſh, bays, and capers. 7. The reins and bladder, as bays and ſaſſafras. 8. The womb, as caſſia lignea and cinnamon. 2. They cool the ſtomach, as pomegranate peels.

III. Woods, are 1. Hot, as aloes, box, ebony, guaiacum, nephriticum, rhodium, roſemary, ſaſſafras, tameriſk. 2. Cold, as cypreſs, ſanders, white, red, and yellow, and willow. As for the fourth qualities, they are appropriate, 1. To the head, as roſemary. 2. To the heart and ſtomach, as of aloes. 3. The bowels and bladder, as rhodium. 4. The liver, ſpleen, reins, and bladder, as nephriticum. 5. The breaſt, ſtomach, and bladder, as ſaſſafras. 6. To the ſpleen, as tamariſk. 7. The heart and ſpirits, as ſanders.

IV. Leaves, are 1. Temperate, as bugle, cinquefoil, betony, flixweed, goat's rue, hart's tongue, fluellin, maiden hair, cammoca black and golden, Paul's betony, trefoil, wall-rue, and wood-roſe. 2. Hot, and ſo in the firſt degree; as agrimony, avens, borrage, bugloſs, baſil, cleavers, cetrach, chervil, camomile, cowſlips, diſtaff thiſtle, eyebright, marſhmallows, melilot, lady's thiſtle, and ſelf-heal. In the ſecond, as alehoof, alexanders, archangel, betony, bay, broom, bawm, coſtmary, cuckoo flowers, carduus benedictus, centaury leſs, chamæpytys, dill, double-tongue, devil's bit, hoarhound, Indian leaf, lady's mantle, maudlin, mugwort, marigold, marjoram, mercury, oak of Jeruſalem, pimpernel male and female, parſley, poley-mountain, perwinkle, roſemary, ſmallage, ſcurvy-graſs, ſage, ſanicle, ſcabious, ſenna, ſoldanella, tanſy, tobacco, vervain, and wormwood common and Roman. In the third; as angelica, arſeſmart biting, brooklime, briony white and black, bank-creſſes, calamint, clary, dwarf-elder, dodder of thyme, featherfew, fleabane, germander, glaſswort, herb maſtic, lavender, lovage, mints, mother of thyme, nettles, organy, pilewort, pennyroyal, rue, ſouthernwood male and female, celandine, ſneeſewort, ſavin, ſavory ſummer and winter, ſpike, thyme, and water-creſſes. In the fourth; as crowfoot, dittander, garden-creſſes, leeks, roſa ſolis, ſciatica-creſſes, ſtone-crop, ſpurge. 3. Cold, and ſo in the firſt degree; as arach, arſeſmart mild, burdock, burnet, colt's foot, hawkweed, mallows, pellitory of the wall, ſorrel, wood-ſorrel, ſhepherd's purſe, violets, yarrow. In the ſecond; as buckſhorn, chickweed, daiſies, dandelion, duck's meat, endive, knotgraſs, lettuce, plantane, purſlain, fumitory, ſuccory, ſtrawberry, wild tanſy, willow. In the third; as nightſhade and ſengreen. In the fourth; as hemlock, henbane, mandrakes, poppies. 4. Dry, and ſo in the firſt degree; as agrimony, arſeſmart mild, burdock, cleavers, chervil, camomile, cowſlips, colt's foot, double tongue, eyebright, flixweed, hawkweed, marſhmallows, melilot, perwinkle, ſhepherd's purſe, ſelf-heal, and ſenna. In the ſecond, as betony, alehoof, alexanders, archangel, betony, bugle, buckſhorn, broom, birch, bay, burnet, coſtmary, cuckoo-flowers, carduus benedictus, centaury the leſs, cichory, dill, diſtaff-thiſtle, dandelion, devil's bit, endive, featherfew, fumitory, Indian leaf, lady's mantle, maudlin, mugwort, marjoram, mercury, pimpernel, plantanes, parſley, roſemary, ſorrel, ſmallage, ſilverweed, ſtrawberry, ſage, ſanicle, ſcabious, ſoldanella, ſcurvy-graſs, tobacco, vervain, wormwood common and Roman, wood-ſorrel; and willow. In the third; as angelica, arſeſmart hot, brooklime, briony white and black, bank-creſſes, calamint, chamepitys, cinquefoil, clary, dwarf elder, epithymum, fleabane, germander, glaſswort, hoarhound, herb maſtic, herb of grace, lavender, lovage, mints, mother of time, organy, pilewort, penny-royal, poley mountain, ſouthernwood male and female, celandine, ſneeſewort, ſavin, ſavory ſummer and winter, ſilk tanſy, thyme, and trefoil. In the fourth; as crowfoot, garden-creſſes, garlic, leeks, onions, roſa ſolis, ſpurge, and wild rue. 5. Moiſt, and ſo in the firſt degree; as borrage, bugloſs, baſil, mallows, marigolds, and pellitory of the wall. In the fourth, as arach, chickweed, daiſies, duck's meat, lettuce, purſlain, ſowthiſtles, violets, and water lilies. 2. As for the ſecond qualities, they are, 1. mollifying; as arach, bay, beets, cypreſs, fleawort, mallows, marſhmallows, pellitory of the wall, and violets. 2. Hardening, as duck's meat, houſe-leek, herbs cold, nightſhade, purſlain. 3. Opening, as endive, garlic, mallows, marſhmallows, onions, pellitory of the wall, ſuccory, and wormwood. 4. Binding, as amomum, agnus caſtus, cypreſs, cinquefoil, comfrey, bawm, fleawort, horſetail, ivy, knotgraſs, bay, melilot, myrtles, oak, plantane, purſlain, ſhepherd's purſe, ſorrel, ſengreen, and willow. 5. Drawing, as birthwort, dittany, garlic, leeks, onions, pimpernel, and all hot leaves. 6. Cleanſing, as arach, beets, cetrach, chamepitys, dodder, hoarhound, liverwort, pimpernel, pellitory of the wall, ſouthernwood, aſparagus, willow, and wormwood. 7. Extenuating, as camomile, hyſſop, juniper, mugwort, mother of thyme, pennyroyal, ſtechas, and time. 8. Anodyne, as arach, calamint, chamepitys, camomile, dill, henbane, hops, hog's fennel, marjoram, mother of thyme, parſley, roſemary, rue, and wormwood. 9. Diſcuſſing, as arach, beets, camomile, chickweed, dill, maiden hair, marſhmallows, mints, melilot, marjoram, pellitory of the wall, rue, ſouthernwood male and female, and ſtechas; alſo bawm, docks, cleavers, cinquefoil, mallows, ſcordium, water-creſſes. 10. Expelling wind, as camomile, dill, epithymum, fennel, garlic, juniper, marjoram, organy, ſavory winter and ſummer, ſmallage, and wormwood. 3. As for the third qualities, they are, 1. Suppurating, as mallows, marſhmallows, and white lilies. 2. Glutinating, as agrimony, bugle, centaury, chamepitys, cinquefoil, comfrey, germander, horſetail, knot-graſs, mallows, marſhmallows, maudlin, pimpernel, rupturewort, ſtrawberries, ſelf-heal, tobacco, tormentil, wood chervil, and woundwort. 3. Spermatogenic, as clary, rocket, and herbs hot, moiſt, and windy. 4. Emmenonagogic, as biſhop's weed, betony, broom, baſil, cabbages, centaury, camomile, calamints, dodder, dittany, fennel; garlic, germander, hoarhound, hartwort, St. John's wort, maiden-hair, marjoram, mugwort, nettles, organy, pimpernel, poley-mountain, parſley, rue, roſemary, ſouthernwood, ſage, ſmallage, ſavin, ſcordium, thyme, mother of thyme, wormwood, and water-creſſes. 5. Stopping the terms; as comfrey, houſeleek, knotgraſs, myrtles, plantane, ſhepherd's purſe, ſtrawberries, and water-lilies. 4. As for the fourth qualities, they are, 1. Alexipharmic, as aliſanders, betony, carduus benedictus, calamint, carline-thiſtle, agrimony, fennel, garlic, germander, hoarhound, juniper, maiden-hair, organy, pennyroyal, poley-mountain, plantane, rue, ſouthernwood, ſmallage, ſcordium, and wormwood. 2. Cathartic, as 1. Purgers of choler, as centaury, groundſel, hops, mallows, peaches, ſenna, and wormwood. 2. Of melancholy, as dodder, epithymum, fumitory, oxeye, and ſenna. 3. Of phlegm and water, as danewort, briony, white and black elder, hedge hyſſop, laurel, mercury, mezereon, ſpurge, ſenna, and ſneeſewort. 3. Appropriate, and ſo, 1. They heat, 1. The head, as betony, coſtmary, carduus benedictus, cowſlips, eyebright, featherfew, goat's rue, herb maſtic, lavender, laurel, lovage, maudlin, melilot, mother of thyme, pennyroyal, roſemary, celandine, ſcurvy-graſs, ſneeſewort, ſenna, ſpike, thyme, vervain. 2. The throat, as archangel white and red, and devil's bit. 3. The breaſt, as betony, bay, bawm, calamint, camomile, diſtaff-thiſtle, fennel, germander, hyſſop, hoarhound, Indian leaf, maiden-hair, melilot, nettle, oak of Jeruſalem, organy, perwinkle, rue, ſcabious, and thyme. 4. The heart, as angelica, elecampane, borrage, bugloſs, bay, bawm, baſil, carduus benedictus, goat's rue, rue, roſemary, ſouthernwood male and female, ſenna, and woodroof. 5. The ſtomach, as avens, bay, bawm, broom, fennel, Indian leaf, mints, mother of thyme, parſley, ſage, ſchenanth, ſmallage, thyme, and wormwood common and Roman. 6. The liver, as agrimony, alecoſt, aſh, bay, aſſarabecca, the ſmaller centaury, chamepitys, fennel, germander, fox-gloves, hops, hoarhound, hyſſop, lady's thiſtles, maudlin, mother of thyme, pimpernel male and female, parſley, poley-mountain, ſmallage, celandine, ſamphire, ſage, ſcordium, ſenna, ſoldanella, ſpikenard, toad-flax, and water-creſſes. 7. The bowels; as alehoof, alexanders, and camomile. 8. The ſpleen; as agrimony, aſh-tree, bay, centaury the leſs, cetrach, chamepitys, epithymum, fox-gloves, germander, hops, hoarhound, hart's tongue, maiden hair, mother of thyme, parſley, poley-mountain, ſmallage, ſamphire, ſage, ſcordium, ſenna, toad-flax, tamariſk, water-creſſes, and wormwood, 9. The reins and bladder; as agrimony, betony, brooklime, bay, broom, chervil, coſtmary, camomile, clary, germander, hops, maudlin, marſhmallows, melilot, mother of thyme, nettles, organy, pimpernel male and female, pennyroyal, rupturewort, rocket, ſamphire, ſchenanth, ſaxifrage, ſcordium, ſpikenard, toad-flax, vervain, and water-creſſes. 10. The womb; as angelica, archangel, baſil, calamint, coſtmary, dittany of Crete, devil's bit, featherfew, fleabane, maudlin, mugwort, May-weed, melilot, mints, nettles, organy, pennyroyal, periwinkle, ſchenanth, ſage, ſavin, ſcordium, tanſey, thyme, and vervain. 11. The joints; as agrimony, arſeſmart hot, camomile, coſtmary, cowſlips, garden-creſſes, St. John's wort, melilot, roſemary, rue, ſciatica-creſſes, ſage, ſtechas, and water-creſſes. 2. They cool, 1. The head; as fumitory, houſe-leek, lettuce, plantane, ſtrawberry, teaſels, violets, water-lily, willow, and wood-ſorrel. 2. The throat; as bramble, orpine, privet, and ſtrawberries. 3. The breaſt; as bramble, colt's foot, moneywort, orpine, plantane, poppy, mulberry, ſorrel, ſtrawberry, violet, and wood-ſorrel. 4. The heart; as burnet, viper's bugloſs, lettuce, ſorrel, ſtrawberry, violet, water-lily, and wood-ſorrel. 5. The ſtomach, as dandelion, endive, hawkweed, lettuce, orpine, purſlain, ſorrel, ſuccory, ſtrawberry, ſow-thiſtles, and violet. 6. The liver, as dandelion, endive, fumitory, lettuce, liverwort, nightſhade, purſlain, ſorrel, ſtrawberry, ſuccory, water-lily, and wood-ſorrel. 7. The bowels; as buckthorn, burnet, fumitory, mallows, orpine, and plantane. 8. The ſpleen; as endive, fumitory, lettuce, and ſuccory. 9. The reins and bladder; as houſeleek, knot-graſs, lettuce, mallows, moneywort, plantane, purſlain, water-lily, and yarrow. 10. The womb; as arach, burdock, endive, lilies, myrtles, moneywort, purſlain, ſengreen, ſuccory, ſowthiſtles, water-lily, and wild tanſy. 11. The joints; as henbane, houſe-leek, lettuce, nightſhade, vine, and willow-leaves.

V. Flowers, are 1. Hot, and ſo in the firſt degree: as betony, borrage, bugloſs, camomile, melilot, oxeye, and ſtecha; in the ſecond, as amomus, bawm, clove-gilliflowers, hops, jeſſamin, lavender, rocket, ſaffron, ſpikenard, ſchenanth, and roſemary. In the third, as agnus caſtus, epithymum, honey-ſuckles, wall-flowers, or winter-gilliflowers. 2. Cold, and ſo, in the firſt degree; as mallows, red, white, and damaſk, roſes, and violets. In the ſecond, as anemony, endive, ſuccory, and water-lilies white and yellow. In the third, as balauſtines. In the fourth, as henbane and poppies. 3. Moiſt, and ſo in the firſt degree; as borrage, bugloſs, endive, mallows, and ſuccory. In the ſecond, as violets and water-lilies. 4. Dry, and ſo in the firſt degree; as camomile, melilot, oxeye, ſaffron, and roſes. In the ſecond, as nemony, clove-gilliflowers, hops, lavender, peony, rocket, roſemary, and ſpikenard. In the third, as balauſtines, chamepitys, epithymum, germander, and woodbine. 2. As for the ſecond qualities, they are, 1. Mollifying, as mallows, ſaffron, and white lilies. [2. Binding, as agnus caſtus, balauſtines, bawm, clove-gilliflowers,

flowers, melilot, endive, ſaffron, ſuccory, and red roſes. 3. Cleanſing, as beans, damaſk roſes, and elders. 4. Extenuating, as camomile, flower de luce, melilot, and ſtechas. 5. Anodyne, as camomile, centaury, dill, melilot, and roſemary. 6. Helping burnings, as mallows, marſhmallows, and white lilies. 7. Diſcuſſing, as camomile, dill, mallows, marſhmallows, melilot, and ſtechas, &c. 8. Expelling wind, as camomile, dill, ſchenanth, and ſpikenard. As for the third qualities, they are, 1. Suppurating, as ſaffron, and white lilies. 2. Glutinating, as centaury and balauſtines. 3. Emmenonagogic, as betony, camomile, centaury, bawm, roſemary, peony, ſage, ſchenanth, and wall-flowers. 4. Stopping the terms, as balauſtins and water-lilies. As for the fourth qualities, they are, 1. Alexipharmic, as betony and centaury. 2. Cathartic, as 1. Purgers of choler, as damaſk roſes, peaches, and violets. 2. Of phlegm, as broom and elder. 3. Appropriate, and ſo, 1. They heat, 1. The head, as betony, camomile, cowſlips, lavender, melilot, peony, roſemary, ſage, ſelf-heal, and ſtechas. 2. The breaſt, as betony, bawm, ſcabious, and ſchenanth. 3. The heart, as bawm, borrage, bugloſs, roſemary, ſaffron, and ſpikenard. 5. The liver, as camomile, centaury, betony, elder, ſchenanth, and ſpikenard. 6. The ſpleen, as betony, and wall-flowers. 7. The reins and bladder, as betony, marſhmallows, melilot, ſchenanth, and ſpikenard. 8. The womb, as betony, flower de luce, ſage, and ſchenanth. 9. The joints, as camomile, cowſlips, melilot, and roſemary. 2. They cool, 1. the head, as poppies, roſes, violets, and water-lilies. 2. The breaſt and heart, as roſes, violets, and water-lilies. 3. The ſtomach, as roſes and violets. 4. The liver and ſpleen, as endive, and ſuccory. 3. They moiſten the heart, as borrage, bugloſs, and violets. 4. They dry it, as bawm, betony, and roſemary flowers.

VI. Fruits, are, 1. temperate, as currants, dates, figs, pine-nuts, raiſins, and ſebeſtens. 2. Hot, and ſo in the firſt degree; as ſweet almonds, cypreſs-nuts, haſelnuts, jujubes, and green walnuts. In the ſecond, as ben-nuts, capers, fiſtic-nuts, haſel-nuts dry, nutmegs, and dry walnuts. In the third, as anacardium, bitter almonds, carpobalſamum, cloves, cubebs, and juniper berries. In the fourth, as pepper, Guinea pepper and the reſt. 3. Cold, and ſo in the firſt degree; as citrons, pears, prunes, and quinces. In the ſecond, as apples, cucumbers, galls, gourds, lemons, melons, oranges, pompions, pomegranates, peaches, and prunes. In the third, as mandrakes. In the fourth, as ſtramonium. 4. Moiſt, and ſo in the firſt degree; as citrons, lemons, oranges inner rind. In the ſecond, as gourds, melons, peaches, and prunes. 5. Dry, and ſo in the firſt degree; as juniper berries.

In the ſecond, as bay berries, ben-nuts, capers, fiſtic-nuts, nutmegs, pears, pine-nuts, and quinces. In the third, as cloves, and galls. In the fourth, as all peppers. 2. As for the ſecond qualities; they are, 1. Binding, as barberries, cheſnuts, cherries, cornels, ſervices, acorns and their cups, galls, medlars, myrtle berries, nutmegs, olives, pears, peaches, and pomegranates. 2. Extenuating, as ſweet and bitter almonds, bay berries, and juniper berries. 3. Anodyne, as bay berries, figs, ivy berries, juniper berries, currants, all peppers, raiſins, and walnuts. 4. Diſcuſſives, as capers, and all peppers. 5. Expelling wind, as bay berries, juniper berries, nutmegs, and all peppers. 3. As for the third qualities, they are, 1. Glutinating, as acorns, acorn-cups, currants, dates, and raiſins. 2. Spermatogenetic, as ſweet almonds, figs, pine-nuts, and raiſins of the ſun. 3. Emmenonagogic, as capers, and ivy berries. 4. Stopping the terms, as barberries. 5. Diuretic, as winter cherries. 4. As for the fourth qualities, they are, 1. Alexipharmic, as bay berries, citrons, juniper berries, pepper, pomecitrons, and walnuts. 2, Cathartic; as 1. Purgers of choler, as caſſia fiſtula, citrine myrobolans, prunes, raiſins, and tamarinds. 2. Of melancholy, as Indian myrobolans. 3. Of phlegm, as colocynthis, wild cucumbers, and myrobolans. 3. Appropriate; and ſo, 1. They heat, 1. The head, as anacardia, cubebs, and nutmegs. The breaſt, as almonds bitter, cubebs, dates, figs, haſel nuts, jubebs, raiſins of the ſun, and pine-nuts. 3. The heart, as juniper berries, nutmegs, and walnuts. 4. The ſtomach, as almonds ſweet, ben, cloves, juniper berries, nutmegs, olives, and pine-nuts. 5. The ſpleen, as capers. 6. The reins and bladder, as almonds bitter, cubebs, juniper berries, raiſins of the ſun, and pine nuts. 7. The womb, as juniper berries, bay berries, nutmegs, and walnuts. 2. They cool, 1. The breaſt, as oranges, lemons, prunes, and ſebeſtens. 2. The heart, as citrons, lemons, oranges, pears, pomegranates, and quinces. 3. The ſtomach, as apples, citrons, cucumbers, cherries, cornels, currants, ſervices, gooſeberries, gourds, lemons, medlars, muſk-melons, oranges, pears, pompions, and quinces. 4. The liver, as barberries, and coolers of the ſtomach. 5. The reins and womb, as ſtrawberries, and the ſame.

VII. Seeds, are 1. Hot, and ſo in the firſt degree; as coriander, fenugreek, gromel, linſeed, lupines, and rice. In the ſecond, as baſil, dill, nettles, orobus, rocket, and ſmallage. In the third, as amomus, anniſeed, biſhop's weed, carraway, cardamoms, carrots, cummin, fennel, hartwort, navew, nigella, and ſtaves acre. In the fourth, as muſtard-ſeed, and water-creſſes. 2. Cold; and ſo in the firſt degree, as barley. In the ſecond, as citruls, cucumbers, endive, gourds, lettuce, melons, nightſhade, pompions, purſlain, ſorrel, and ſuccory. In the third, as hemlock, henbane, and poppies white and black. 3. Moiſt, and ſo in the firſt degree; as mallows. 4. Dry, and ſo in the firſt degree; as barley, beans, fennel, fenugreek, and wheat. In the ſecond; as lentils, nightſhade, orobus, poppies, and rice. In the third; as anniſeed, carraway, coriander, cummin, biſhop's weed, dill, gromel, nigella, parſley, and ſmallage. 2. As for the ſecond qualities, they are, 1. Mollifying; as fenugreek, linſeed, mallows, and nigella. 2. Hardening; as purſlain-ſeed. 3. Binding; as barberries, purſlain, roſe-ſeeds, and ſhepherd's purſe. 4. Cleanſing; as barley, beans, lupines, nettles, and orobus. 5. Anodyne; as amomus, carrots, cardamoms, cummin, dill, fenugreek, gromel, linſeed, orobus, panic, and parſley. 6. Diſcuſſing; as carrots, dill, fenugreek, nigella, and linſeed; alſo barley, coriander, darnel, lupines, mallows, and marſhmallows, helping ſwellings. 7. Expelling wind; as anniſeed, carraway, carrots, cummin, dill, fennel, hartwort, nigella, parſley, ſmallage, and wormwood. As for the third qualities, they are 1. Suppurating; as darnel, fenugreek, French barley, and linſeed. 2. Glutinating; as darnel, lupines, and orobus. 3. Spermatogenetic; as aſh-tree keys, beans, cicers, and rocket. 4. Emmenonagogic; as amomus, annis, biſhop's weed, carrots, cicers, fennel, hartwort, parſley, lovage, ſperage, and ſmallage. 5. Stopping the terms; as burdock, cummin, and roſe-ſeeds. 6. Lithontriptic; as gromel, mallows, and marſhmallows. 4. As for the fourth qualities, they are, 1. Alexipharmic; as annis, biſhop's weed, cardamoms, citrons, fennel, lemons, oranges, and ſmallage. 2. Appropriate; and ſo 1. They heat, 1. the head; as fennel, marjoram, and peony. 2. The breaſt; as nettles. 3. The heart; as baſil, rue, and muſtard-ſeed. 4. The ſtomach; as amomus, annis, biſhop's weed, cardamoms, cubebs, cummin, grains of paradiſe, and ſmallage. 5. The liver; as amomus, annis, biſhop's weed, carraway, carrots, cummin, fennel, ſmallage, and ſperage. 6. The ſpleen; as annis, carraway, and water-creſſes. 7. The reins and bladder: as cicers, gromel, nettles, rocket, and ſaxifrage. 8. The womb; as peony and rue. 9. The joints; as muſtard-ſeed, rue, and water creſſes. 2. They cool, 1. The head; as lettuce, white poppies, and purſlain. 2. The breaſt; as white poppies and violets. 3. The heart; as citrons, lemons, oranges, and ſorrel-ſeed: alſo the four greater and ſmaller cold ſeeds, viz. of citruls, cucumbers, gourds, and melons; endive, lettuce, purſlain, and ſuccory, cool the liver, ſpleen, reins, bladder, womb, and joints; and the white and black poppy ſeed.

VIII. Gums, are, 1. Temperate; as elemi, lacca, and tragacanth. 2. Hot, and ſo in the firſt degree; as bdellium and ivy-gum. In the ſecond; as frankincenſe, galbanum, maſtic, myrrh, olybanum, pitch, roſin, and ſtyrax. In the third; as ammoniacum. In the fourth; as euphorbium. 3. Cold, as gum arabic. 2. As for the ſecond qualities, they are, 1. Mollifying; as ammoniacum, bdellium, colophonia, galbanum, apopanax, turpentine, roſin, pitch, and ſtyrax. 2. Binding, as gum arabic, ſandarac or Jupiter gum, and tragacanth. 3. As for the third qualities, they are, 1. Emmenonagogic, as ſtyrax. 2. Lithrontriptic, as cherry-gum. 4. As for the fourth qualities, they are cathartic, as apopanax, purging phlegm.

IX. Juices, are, 1. Temperate; as liquorice and white ſtarch. 2. Hot, and ſo in the firſt degree; as ſugar. In the ſecond, as labdanum. In the third, as aſſafœtida and benjamin. 3. Cold, and ſo in the ſecond degree; as acacia and ſanguis draconis. In the third; as hypocyſtis. In the fourth; as opium. As for the fourth qualities, they are cathartic; as aloes, manna, and ſcammony, purging choler.

X. Waters, are, 1. Hot; and ſo, 1. Concocting phlegm. 1. In the head; as betony, calamint, camomile, eyebright, fennel, marjoram, primroſes, roſemary, and ſage. 2. In the breaſt and lungs; as bawm, betony, carduus benedictus, flower de luce, hoarhound, hyſſop, maiden-hair, ſcabious, and ſelf-heal. 3. In the heart; as bawm and roſemary. 4. In the ſtomach; as chervil, fennel, marigolds, mints, mother of thyme, thyme, and wormwood. 5. In the liver; as agrimony, centaury, coſtmary, marjoram, maudlin, organy, fennel, and wormwood. In the ſpleen; as calamint, water-creſſes, and wormwood. In the reins and bladder; as burnet, elecampane, nettles, pellitory of the wall, rocket, and ſaxifrage. In the womb, as calamint, lovage, mother of thyme, mugwort, pennyroyal, and ſavin. 2. Concocting melancholy; 1. In the head, as fumitory and hops. 2. In the breaſt, as bawm, and carduus benedictus. In the heart, as bawm, borrage, bugloſs, and roſemary. 4. In the liver, as cichory, endive, and hops. 5. In the ſpleen, as dodder, hart's tongue, tamariſk, and thyme. 2. Cold; and ſo 1. Cooling the blood; as endive, fumitory, lettuce, purſlain, ſorrel, ſuccory, violets, and water-lilies. 2. Cooling choler; 1. In the head; as black cherries, lettuce, nightſhade, plantain, poppies, and water-lilies. 2. In the breaſt and lungs; as colt's-foot, poppies, and violets. 3. In the heart; as roſes, ſorrel, quinces, violets, walnuts green, and water-lilies. 4. In the ſtomach; as houſe-leek, lettuce, nightſhade, purſlain, quinces, roſes, ſengreen, and violets. 5. In the liver; as endive, nightſhade, purſlain, ſuccory, and water-lilies. 6. In the reins and bladder; as black cherries, endive, houſe-leek, plantane, ſtrawberries, ſuccory, water-lilies, and winter-cherries. 7. In the womb; as endive, lettuce, purſlain, roſes, ſuccory, and water-lilies. Thus of the vegetable ſimples; now follow their compoſitions, which are,

I. Wines, which are, 1. Hot; heating 1. The head, as betony, fennel, eyebright, roſemary, ſage, and ſtechas. 2. The heart, as borrage and bugloſs. 3. The breaſt, as elecampane, hyſſop, and raiſins. 4. The ſtomach, as black cherries, ſorrel, and wormwood. 5. The liver, as germander. 6. The ſpleen, as tamariſk. 7. The reins and bladder, as ſage and winter-cherries. 2. Binding, as myrtles, roſes, and quinces. 3. Provoking ſweat, as pockwood. 4. Purging; 1. Phlegm, as ſquills. 2. Choler yellow, as ſcammony. 3. Melancholy, as black hellebore. 4. Water, as danewort, thymelæ, and chamelæ.

II. Decoctions, which are 1. Raficient, as barley, cicers, and ptiſan. 2. Temperate, as the common, and of flowers and fruits. 3. Heating the breaſt, as the pectoral. 4. Aromatic, as the two for wounded men. 5. Sudorific, as guaiacum. 6. Purgers, of 1. The blood, as maiden-hair and fumitory. 2. Choler yellow, as of fruits. 3. Of phlegm, as ſtechas and thyme. 4. Melancholy, as of epithymum, and ſenna of Gereon. 5. Mixed humours, as fumitory and myrobolans.

III. Syrups, which are, 1. Altering, and ſo concocting, 1. Choler; 1. In the head, as poppies and water-lilies. 2. In the breaſt, as jujubes, pomegranates, and violets. 3. In the ſtomach, as agreſta, aceroſe, myrtles, oxyſaccharate, quinces, and roſes. 4. In the heart, as aceroſs, citrons, lemons, and oranges. 5. In the liver, as endive and ſuccory. 2. Phlegm; 1. In the head, as betony, ſtechas, and annardine honey. 2. In the breaſt, as hyſſop, hoarhound calamint, liquorice, maidenhair, and ſcabious. 3. In the heart, as the byzantine. 4. In the ſtomach, as mints, oxymel of ſquills, and common honey of roſes and wormwood. 5. In the liver, as eupatorium, and two and five roots. 6. In the matrix, as mugwort. 3. Melancholy; 1. In the heart, as borrage, bugloſs, and apples. 2. In the liver and ſpleen, as hops, epithymum, ſpleenwort, and fumitory. 2. Purging; 1. Choler, as of cichory with rhubarb, peach-flowers, rhubarb, roſes, violets, and mercurial honey. 2. Phlegm, as of briony-roots, hermodactils and oxymel helleborated, and julianizans. 3. Mixed humours, as diaſereos.

IV. Lohochs, which are, 1. Aſtringent, as of diaſcordium, of fleawort, and poppies. 2. Abſterſive, as of colt's foot, colewort, pine-kernels, hoarhound, baſtard ſaffron, ſorrel, ſquills, raiſins, ſanum, and expertum.

V. Preserves, which are, 1. Hot, heating and corroborating, 1. The heart, as apples, citron-peels, myrobolans, chebs, nutmegs, Indian nuts, and orange-peels. 2. The ſtomach, as acorus, aromatical reed, galingal, ginger, citron-peels, Indian nuts, pears, quinces, and walnuts. 3. The reins, as eringo-roots. 2. Cold, cooling and ſtrengthening; 1. The ſtomach, as myrobolans, emblics, cherries, medlars, peaches, prunes, and ſervices. 2. The liver, as cichory-roots.

VI. Conserves, which are, 1. Hot, heating, 1. The head, as of acorus, betony, eyebright, lavender-flowers, marjoram, peony, roſes, roſemary, ſage, and ſtechas-flowers. 2. The breaſt, as bawm, hyſſop, and maiden-hair. 3. The heart, as borrage, bugloſs, clove-gilliflowers, orange and roſemary flowers. 4. The ſtomach, as elecampane, mints, and wormwood. 5. The liver, as elder-flowers, fumitory, and wormwood. 6. The ſpleen, as fumitory and ſpleenwort. 7. The womb, as bawm, marjoram, and roſemary-flowers. 2. Cold; cooling, 1. The head, as roſes, violets, and water-lily flowers. 2. The breaſt, as violets. 3. The heart, as roſes, ſorrel, and violets.. 4. The ſtomach, as roſes and violets. 5. The liver, as cichory, roſes, and violet-flowers. 6. The ſpleen, as roſes and violets. 7. The reins, as roſes. 8. The womb, as roſes and violets. 9. The joints, as roſes and violets.

VII. Powders, which are, 1. Hot, heating, 1. The head, as diacorum, diapeonias, and pleres arconticon. 2. The breaſt, as diapenidion, diatragacanth hot, diacalaminth, diahyſſopum, diapraſium, and diathamaron. 3. The heart, as aromaticum, roſatum, and caryophyllatum, dianthos, and diaxylo-aloes. 4. The ſtomach, as the roſat-aromatic, diagalanga, dianiſum, diaxylo-aloes, diacyminum, diacinnamomum, diazinziber, diaſpoliticum, diatrion-piperion. 5. The liver, as dialacca, diacurcuma, diacinnamomum, diacalaminth. 6. The ſpleen, as diacapparis. 7. The womb, as diacalaminth. 2. Cold, cooling, 1. The head, as diapapaver, and diatragacanth. 2. The heart, as diarrhodon-abbatis and diatrion-ſantalon. 3. The ſtomach, as diarrhodon-abbatis and diatrion-ſantalon. 4. The liver, as diarrhodon-abbatis and diatrion-ſantalon. 5. The ſpleen, as diatrion-ſantalon and diarrhodon-abbatis. 6. The womb, as diatrion-ſantalon and diarrhondon-abbatis. 7. The joints, as diarrhodon-abbatis and diatrion-ſantalon.

VIII. Electuaries, which are, 1. Hot; heating, 1. The head, as confectio anacardina and theriaca diateſſaron. 2. The breaſt, as diaireos. 3. The heart, as confectio alkermes. 4. The ſtomach, as excitro of bay-berries, and roſata novela. 5. The liver, as diacinnamomum. 6. The ſpleen, as diacapparis. 2. Cold; cooling, 1. The head, as the reſumptivum. 2. As for the ſecond qualities, they are aſtringent, as diacydonium, miclera, and triphera minor. 3. As for the third qualities, they are, 1. Lithontriptic, as lithontribon. 2. Venereal, as diaſatyrion, diacaryon, and triphera ſar. 4. As for the fourth qualities, they are cathartic; purging, 1. Choler, as diaprunum ſol. de pſyllio, and of roſes. 2. Phlegm, as benedicta laxativa, diaphenicon, diaturbith, hiera picra, with agaric, pachy, hermetis, and diacolocynth. 3. Melancholy, as diaſenna, confectio hamech, diapolypodium, and hieralogadium. 4. Mixed humours, as diacarthamum, diaturbith with rhubarb, and hiera ruffi.

IX. Pills, which are, 1. Anodyne, as laudanum, ex cynogloſſo, and of ſtyrax. 2. Cathartic; purging, 1. Choler; 1. In the head, as the golden pill, and arabic. 2. In the liver, as of eupatorium and rhubarb. 2. Phlegm; 1. In the head, as the cochie of hiera with agaric, coloquintida, alhandal, and of ſix and eight things. 2. In the breaſt, as of agaric, and heira with agaric. 3. In the ſtomach, as the aloephangine, maſtic, ſtomach, of turbith, common and peſtilential. 4. In the joints, as the arthritic, fetid, of hermodactils, opopanax, ſagapen, and ſarcocol. 3. Melancholy; in the liver and ſpleen, as of fumitory and indic. 4. Water, as of euphorbium and mezereon. 5. Mixed humours; 1. In the head, as the cochie lucis greater and ſmaller, and ſine quibus. 2. In the ſtomach, as the golden aſſaireth, aloes, hiera ſimple, imperial, turbith, maſtic, and peſtilential. 3. In the liver, as of three things, and halicacabum. 4. In the whole body, as the aggregative.

X. Troches, which are, 1. Hot, as of xylaloes, ſaffron, and crocamagna damoe. 2. Cold, as of camphire and ſanders. As for the ſecond qualities, they are, 1. Aſtringent, as of barberries and diaſpermaton. 2. Emollient; as of capers. 3. Opening, as of bitter almonds, benjamin, anniſeed, lacca, eupatorium, myrrh, roſes, rhubarb, winter-cherries, and wormwood. 4. Abſterſive, as cypheos. 5. Anodyne, as camphire, diarrhodon, diaſpermaton. 4. As for the fourth qualities, they are cathartic; purging, 1. Choler, as of rhubarb. 2. Phlegm, as of agaric, alhandel. and hamech. 3. Mixed humours, as of violets.

XI. Oils, which are, 1. Hot; heating, 1. The ſtomach, as of maſtic, mints, nard, and wormwood. 2. The liver, as of bitter almonds, maſtic, nard, peaches, and wormwood. 3. The ſpleen, as of capers, behen, lilies, and ſpike. 4. The womb, as the cherine, dill, flower de luce, ſaffron, and nard. 5. The joints, as of nard, nutmegs, and Indian nuts. 6. The nerves, as of coſtus, euphorbium, maſtic, pepper, ſweet marjoram, and elecampane. 2. Cold; cooling, 1. The head, as of mandrakes and poppies. 2. The ſtomach, as the lentiſk, myrtine, myrtle, omphacine, quinces, and roſes. 3. The breaſt, as of violets and water-lilies. 4. The liver, as the ſtomachical. 5. The reins, as water-lilies. 6. The nerves, as lentiſk. 7. The womb, as of gourds, lentiſk, myrtles, quinces, and water-lilies. 3. Dry, as of nard, nuts, and ricinus. 4. Moiſt, as of ſweet almonds, freſh olives, cucumbers, gourds, melons, oily pulſe, and violets. 2. As for the ſecond qualities, they are, 1. Mollifying, as daffodil, linſeed, ſtyrax, camomile, and lilies. 2. Reſolving, as dill, camomile, and euphorbium. 3. Looſening, as of ſweet almonds, jeſſamin, and olives. 4. Binding, as of maſtic, mints, myrtles, myrtine, lentiſk, and œnanthe. 5. Drawing, as of bays, dill, St. John's wort, and rue. Cleanſing, as of myrrh, elder, radiſh and racinus. 7. Digeſting, as of bitter almonds, nuts, olives, and rue. 8. Anodyne, as of camomile, dill, bays, elder, St. John's wort, poplars, lilies, wall-flowers, almonds ſweet, linſeed, olives, omphacine, fleawort, poppies, and roſes. 3. As for the third qualities, they are, 1. Suppurating, as of lilies. 2. Glutinating, as of liquid amber, balſam, myrrh, and tobacco. 3. Incarning, as ſallad-oil. 4. Cicatrizing, as oils of ſuch ſimples. 5. Venereal, as of fiſtic-nuts. 6. Lithontriptic, as of cherries and of citron-kernels. 7. Hypnotic, as of henbane, nightſhade, lilies of the water, mandrakes, and poppies. 4. As for the fourth qualities, they are cathartic, as the enecine and of the thymelæa.

XII. Ointments, which are, 1. Hot, as of bdellium, dialthea, arregon, martiatum, agrippa, and for the ſtomach. 2. Cold, as the white and red camphorate, Galen's refringerant, poplars, roſate, and violets. 2. As for the ſecond qualities, they are, 1. Mollifying, as of briony, dialthea, reſumptivum, tetrapharmacon, and artanite. 2. Binding, as comitiſſæ, defenſivum, Galen's refrigerant, citrinum, populeon, and the pectoral. 3. Drawing, as the fuſcum, arregon, agrippæ, martiatum. 4. Cleanſing, as the citron and egyptiac. 5. Anodyne, as the anodyne, pectoral, dialthea, arregon, martiatum, reſumptivum, populeon, and Galen's refrigerant. 6. Hypnotic, as populeon. 7. Reſolving, as of bays, agrippæ, arregon, and martiatum.

atum. 3. As for the third qualities, they are, 1. Suppurating, as baſilicon. 2. Incarning, as aureum and comitiſſæ. 3. Glutinating, as aureum and the citron, and potable. 5. Cicatrizing, as album and rubrum. 4. As for the fourth qualities, they are cathartic, as agrippæ, and of ſowbread.

XIII. Cerates, which are, 1. Hot, as of euphorbium, and that for the ſtomach. 2. Cold, as the ſantaline.

XIV. Plaisters, which are, 1. Hot, as that for the ſtomach. 2. Cold, as that of hemlock. 2. As for the ſecond qualities, they are, 1. Mollifying, as diachylon, gratis dei, that of melilot and oxycroceum. 2. Binding, as of the cruſt of bread, and diaphenicon. 3. Drawing, as of betony, diachylon magnum, with gums of melilot and oxycroceum. 4. Cleanſing, as iſis gal. de janua divinum. 5. Anodyne, as of bayberries, melilot, oxycroceum. 6. Reſolving, as great diachylon, with gums of cummin, bayberries, melilot, and oxycroceum. 3. As for the third qualities, they are, 1. Suppurating, as diachylon ſimple, the great with gums, and of mucilages. 2. Incarning, as of betony, diapalma, de janua, and nigrum. 3. Glutinating, as diapalma and nigrum. 4. Cicatrzing, as diapalma.

XV. Extracts, which are, 1. Glutinating, as of comfrey. 2. Spermatogenetic, as of ſatyrion. 3. Cathartic; purging, 1. Choler, as of rhubarb. 2. Phlegm, as of agaric and aloes. Melancholy, as of black hellebore.

XVI. Salts, which are, 1. Cathartic; purging, 1. By coughing, as of St. John's wort and polypody. 2. By urine, as of camomile, bean-ſtalks, broom, gentian, juniper, hedge-hyſſop, reſt-harrow, and wormwood. 3. By the womb, as of bawm, celandine, and mugwort. 4. By ſweat, as of pockwood.

Thus far of vegetables, conſidered as medicinal and alimentary, with their principal differences in reſpect of the whole or parts; as trees or herbs, by their roots, barks, woods, leaves, flowers, fruits, buds, ſeeds or grains, tears, liquors, gums, roſins, juices, things bred thereof, and waters, &c. with their temperature and qualities, firſt, ſecond, and third; and as appropriate and medicinal in general. As alſo of their compounds, viz. Spirits, waters, tinctures, wines, vinegars, decoctions, ſyrups, robs, lohochs, preſerves, conſerves, ſugars, powders, electuaries, pills, troches, oils, ointments, cerecloths, plaiſters, and chymicals: and of roots, barks, leaves, flowers, fruits, buds, grains or pulſes, juices, and oils. As alimentary in general we have fully ſpoken; there now remains the more particular enquiry thereinto from the plants and herbs themſelves, which are the baſis of the whole.

The differences of vegetables, as to their parts and qualities, the ſynonimous names of plants and herbs, and the ſeveral diſeaſes they are found to cure, according to the experience of all botanical authors, now follow in alphabetical order, and form a complete arrangement of family and phyſical herbs, which grow ſpontaneouſly in the different parts of this iſland for the natural cure or nouriſhment of its diſeaſed inhabitants.

**END of the TREATISE.**

# CULPEPER's ENGLISH PHYSICIAN,

## CONTAINING THE

# HERBAL.

## AMARA-DULCIS.

CONSIDERING that divers ſhires in this nation give divers names to one and the ſame herb, and that the common name which it bears in one county is not known in another; I ſhall take the pains to ſet down all the names that I know of each herb. Pardon me for ſetting that name firſt which is moſt common to myſelf; beſides amara-dulcis, ſome call it morral, others bitter-ſweet, ſome wood-nightſhade, and others felon-wort.

Description. It grows up with woody ſtalks even to a man's height, and ſometimes higher; the leaves fall off at the approach of winter, and ſpring out of the ſame ſtalk again at ſpring-time; the branch is encompaſſed about with a whitiſh bark, and hath a pith in the middle of it; the main branch ſpreadeth itſelf out into many ſmall ones, with claſpers, laying hold on what is next to them, as vines do; it bears many leaves; they grow in no order at all, or at leaſt in no vulgar order; the leaves are longiſh, though ſomewhat broad and pointed at the ends; many of them have two little leaves growing at the end of their footſtalk, ſome of them have but one, and ſome none; the leaves are of a pale green colour; the flowers are of a purple colour, or of a perfect blue, like to violets, and they ſtand many of them together in knots; the berries are green at the firſt, but, when they are ripe, they are very red; if you taſte them, you ſhall find them juſt as the crabs which we in Suſſex call bitter-ſweet, viz. ſweet at firſt, and bitter afterwards.

Place. They grow commonly almoſt throughout England, eſpecially in moiſt and ſhady places.

Time. The leaves ſhoot out about the latter end of March; if the temperature of the air be ordinary, it flowereth in July, and the ſeeds are ripe ſoon after, uſually in the next month.

Government and Virtues. It is under the planet Mercury, and a notable herb of his alſo, if it be rightly gathered under his influence. It is excellent good to remove witchcraft, both in men and beaſts; as alſo all ſudden diſeaſes whatſoever. Being tied about the neck, it is one of the moſt admirable remedies for the vertigo, or dizzineſs in the head, and that is the reaſon (as Tragus ſaith) the people in Germany commonly hang it about their cattle's neck when they fear any ſuch evil hath betided them. Country people commonly uſe to take the berries of it, and, having bruiſed them, they apply them to felons, and thereby ſoon rid their fingers of ſuch troubleſome gueſts.

Now we have ſhewn you the external uſe of the herb, we ſhall ſpeak a word or two of the internal, and ſo conclude. Take notice, that it is a mercurial herb, and therefore of very ſubtle parts, as indeed all mercurial plants are; therefore take a pound of the wood and leaves together, bruiſe the wood, (which you may eaſily do, for it is not ſo hard as oak;) then put it in a pot, and put to it three pints of white wine; put on the pot-lid, and ſhut it cloſe; then let it infuſe hot over a gentle fire twelve hours; then ſtrain it out; ſo you have a moſt excellent drink to open obſtructions of the liver and ſpleen, to help difficulty of breath, bruiſes, and falls, and congealed blood in any part of the body, to help the yellow jaundice, the dropſy, and black jaundice, and to cleanſe women newly brought to bed. You may drink a quarter of a pint of the infuſion every morning; it purgeth the body very gently, and not churliſhly as ſome hold. And, when you find good by this, remember me.

## ALHEAL.

IT is called alheal, Hercules's alheal, and Hercules's woundwort; becauſe it is ſuppoſed that Hercules learned the virtues of this herb from Chiron, when he learned phyſic of him: ſome call it panay, and other opopanawort.

Description. Its root is long, thick, and exceedingly full of juice, of a hot and biting taſte; the leaves are great and large, and winged almoſt like aſh-tree leaves, but that they are ſomewhat hairy, each leaf conſiſting of five or ſix pair of ſuch wings ſet one againſt the other, upon footſtalks broad below, but narrow toward the end; one of the leaves is a little deeper at the bottom than the other, of a fair, yellowiſh, freſh, green colour; they are of a bitteriſh taſte, being chewed in the mouth. From among theſe riſeth up a ſtalk, green in colour, round in form, great and ſtrong in magnitude, five or ſix feet in altitude, with many joints and ſome leaves thereat; towards the top come forth umbels of ſmall yellow flowers, and after they are paſſed away you may find whitiſh-yellow ſhort flat ſeeds, bitter alſo in taſte.

Place. Having given you the deſcription of the herb from the bottom to the top, give me leave to tell you that there are other herbs called by this name; but, becauſe they are ſtrangers in England, I gave only the deſcription of this, which is eaſy to be had in the gardens of divers perſons.

Time. Although Gerrard ſaith that they flower from the beginning of May to the end of December, experience teacheth thoſe that keep it in their gardens, that it does not flower till the latter end of the ſummer, and ſheds its ſeeds preſently after.

Government and Virtues. It is under the dominion of Mars; hot, biting, and choleric; and remedies what evils Mars afflicts the body of man with by ſympathy, as viper's fleſh attracts poiſon and the loadſtone iron. It kills worms; helps the gout, cramp, and convulſions; provokes urine, and helps all joint achs; it helps all cold griefs of the head, the vertigo, falling ſickneſs, and lethargy; the wind-cholic, obſtructions of the liver and ſpleen, ſtone in the kidneys and bladder. It provokes the terms, expels the dead birth; it is excellent good for the grief of the ſinews, itch, ſores, and tooth-ach; alſo the biting of mad dogs and venomous beaſts; and purgeth choler very gently.

## ALKANET.

BESIDES the common name, it is called orchanet and Spaniſh bugloſs, and by apothecaries anchuſa.

Description. Of the many ſorts of this herb there is but one grows commonly in this nation, of which one take this deſcription. It hath a great and thick root of a reddiſh colour; long, narrow, and hairy, leaves, green like the leaves of bugloſs, which lie very thick upon the ground, and the ſtalks riſe up compaſſed about thick with leaves, which are leſs and narrower than the former; they are tender and ſlender; the flowers are hollow, ſmall, and of a reddiſh purple colour; the ſeed is greyiſh.

Place. It grows in Kent near Rocheſter, and in many places in the weſt country, both in Devonſhire and Cornwall.

Time. They flower in July and the beginning of Auguſt, and the ſeed is ripe ſoon after; but the root is in its prime, as carrots and parſnips are, before the herb runs up to ſtalk.

Government and Virtues. It is an herb under the dominion of Venus, and indeed one of her darlings, though ſomething hard to come by. It helps old ulcers, hot inflammations, burnings by common fire and St. Anthony's fire, by antipathy to Mars; for theſe uſes, your beſt way is to make it into an ointment. Alſo if you make a vinegar of it, as you make vinegar of roſes, it helps the morphew and leproſy; if you apply the herb to the privities, it draws forth the dead child; it helps the yellow jaundice, ſpleen, and gravel in the kidneys. Dioſcorides ſaith it helps ſuch as are bitten by venomous beaſts, whether it be taken inwardly or applied to the wound; nay, he ſaith further, if any one who hath newly eaten it do but ſpit in the mouth of a ſerpent, the ſerpent inſtantly dies. It ſtays the flux of the belly, kills worms, helps the fits of the mother; its decoction, made in wine and drunk, ſtrengthens the back, and eaſeth the pains thereof; it helps bruiſes and falls, and is a good remedy to drive out the ſmall pox and meaſles. An ointment made of it is excellent for green wounds, pricks, or thruſts.

## ADDER's TONGUE, or SERPENT's TONGUE.

Description. THIS ſmall herb hath but one leaf, which grows with the ſtalk a finger's length above the ground, being fat, and of a freſh green colour, broad like the water plantane, but leſs, without any middle rib in it; from the bottom of which leaf, on the inſide, riſeth up ordinarily one, ſometimes two or three, ſmall ſlender ſtalks, the upper half whereof is ſomewhat bigger, and dented with ſmall round dents of a yellowiſh green colour, like the tongue of an adder or ſerpent. Only this is as uſeful as they are formidable. The root continues all the year.

Place. It groweth in moiſt meadows and ſuch-like places.

Time. And is to be found in April and May, for it quickly periſheth with a little heat.

Government and Virtues. It is an herb under the dominion of the Moon in Cancer; and therefore, if the weakneſs of the retentive faculty be cauſed by an evil influence of Saturn in any part of the body governed by the Moon, or under the dominion of Cancer, this herb cures it by ſympathy; it cures thoſe diſeaſes after ſpecified in any part of the body under the influence of Saturn by antipathy.

It is temperate in reſpect of heat, but dry in the ſecond degree. The juice of the leaves drunk with the diſtilled water of horſe-tail is a ſingular remedy for all manner of wounds in the breaſt, bowels, or other parts of the body, and is given with good ſucceſs unto thoſe who are troubled with caſting, vomiting, or bleeding at the mouth or noſe, or otherwiſe downwards. The ſaid juice, given in the diſtilled water of oaken buds, is very good for women who have their uſual courſes, or the whites, flowing down too abundantly. It helps ſore eyes. The leaves infuſed or boiled in oil omphacine, or unripe olives ſet in the ſun for certain days, or the green leaves ſufficiently boiled in the ſaid oil, make an excellent green balſam, not only for green and freſh wounds, but alſo for old and inveterate ulcers; eſpecially if a little fine clear turpentine be diſſolved therein. It alſo ſtayeth and repreſſeth all inflammations that ariſe upon pains by hurts or wounds, either taken inwardly or outwardly applied. For ruptures or burſten bellies, take as much of the powder of the dried leaves as will lie on a ſixpence, or leſs, according to the age of the party, in two ounces of horſe-tail or oak-bud water, ſweetened with ſyrup of quinces. Uſe it every morning for the ſpace of fifteen days. But, before you enter upon the uſe of this or any other medicine, the gut, if it fall into the ſcrotum, muſt be reduced by a ſurgeon, and a truſs muſt be worn to keep it up, and the party muſt avoid all violent motions, and lie as much as may be in bed, or on a couch. Fabricius Hildanus ſays, that ſome have been cured of great ruptures by lying in bed, when they could be cured no other way.

## AGRIMONY.

Description. THIS hath divers long leaves, ſome greater, ſome ſmaller, ſet upon a ſtalk, all of them dented about the edges, green above, and greyiſh underneath, and a little hairy withal. Among which riſeth up uſually but one ſtrong, round, hairy, brown ſtalk, two or three feet high, with ſmaller leaves ſet here and there upon it; at the top whereof grow many yellow flowers one above another in long ſpikes, after which come rough heads of ſeeds hanging downwards, which will cleave to and ſtick upon garments, or any thing that ſhall rub againſt them. The root is black, long, and ſomewhat woody, abiding many years, and ſhooting afreſh every ſpring; which root, though ſmall, hath a pleaſant ſmell.

Place. It grows upon banks, near the ſides of hedges or rails.

Time. It flowereth in July and Auguſt, the ſeed being ripe ſhortly after.

Government and Virtues. It is moderately hot and moiſt, according to the nature of Jupiter. It is under Jupiter and the ſign Cancer, and ſtrengthens thoſe parts under that planet and ſign and remove diſeaſes in them by ſympathy, and thoſe under Saturn, Mars, and Mercury, by antipathy, if they happen in any part of the body governed by Jupiter, or under the ſigns Cancer, Sagittarius, or Piſces;

and therefore muſt needs be good for the gout, either uſed outwardly in an oil or ointment, or inwardly in an electuary or ſyrup, or concreted juice; for which ſee the latter end of the book. It has moreover been recommended in dropſies and the jaundice. Externally, it has indeed its uſe: I have ſeen very bad ſore legs cured by bathing and fomenting them with a decoction of this plant.

It is of a cleanſing and cutting faculty, without any manifeſt heat, moderately drying and binding. It openeth and cleanſeth the liver, helpeth the jaundice, and is very beneficial to the bowels, healing all inward wounds, bruiſes, hurts, and other diſtempers. The decoction of the herb made with wine, and drunk, is good againſt the biting and ſtinging of ſerpents, and helps them that have foul, troubled, or bloody, water, and cauſes them to make water clear and ſpeedily. It alſo helpeth the cholic, cleanſeth the breaſt, and relieves the cough. A draught of the decoction, taken warm before the fit, firſt relieves, and in time removes, the tertian or quartan ague. The leaves and ſeed, taken in wine, ſtay the bloody-flux; outwardly applied, being ſtamped with old ſwine's greaſe, it helpeth old ſores, cancers, and inveterate ulcers; and draweth forth thorns, ſplinters of wood, nails, or any other ſuch thing, gotten into the fleſh. It helpeth to ſtrengthen the members that be out of joint; and being bruiſed and applied, or the juice dropped in, it helpeth foul and impoſthumed ears.

The diſtilled water of the herb is good to all the ſaid purpoſes, either inward or outward, but is a great deal weaker.

I cannot ſtand to give you a reaſon in every herb why it cureth ſuch diſeaſes; but, if you pleaſe to peruſe my judgment in the herb wormwood, you ſhall find it there; and it will be well worth your while to conſider it in every herb; you ſhall find them true throughout the book.

## WATER-AGRIMONY.

IT is called in ſome countries water-hemp, baſtard-hemp, and baſtard-agrimony; alſo eupatorium and hepatorium, becauſe it ſtrengthens the liver.

Description. The root continues a long time, having many long ſlender ſtrings; the ſtalks grow up about two feet high, ſometimes higher; they are of a dark purple colour; the branches are many, growing at a diſtance the one from the other, the one from the one ſide of the ſtalk, the other from the oppoſite point; the leaves are winged, and much indented at the edges; the flowers grow at the tops of the branches, of a brown yellow colour, ſpotted with black ſpots, having a ſubſtance within the midſt of them like that of a daiſy; if you rub them between your fingers, they ſmell like roſin, or cedar when it is burnt; the ſeeds are long, and eaſily ſtick to any woollen thing they touch.

**Place.** They delight not in heat, and therefore they are not ſo frequently found in the ſouthern parts of England as in the north, where they grow frequently; you may look for them in cold grounds, by ponds and ditch-ſides, as alſo by running waters; ſometimes you will find them grow in the midſt of the waters.

**Time.** They all flower in July and Auguſt, and the ſeed is ripe preſently after.

**Government and Virtues.** It is a plant of Jupiter, as well as the other agrimony; only this belongs to the celeſtial ſign Cancer. It healeth and drieth, cutteth and cleanſeth, thick and tough humours of the breaſt; and for this I hold it inferior to but few herbs that grow. It helps the cachexia, or evil diſpoſition of the body; the dropſy and yellow jaundice. It opens obſtructions of the liver, and mollifies the hardneſs of the ſpleen; being applied outwardly, it breaks impoſthumes; taken inwardly, it is an excellent remedy for the third-day ague; it provokes urine and the terms; it kills worms, and cleanſeth the body of ſharp humours, which are the cauſe of itch, ſcabs, &c. The ſmoke of the herb, being burnt, drives away flies, waſps, &c. and it ſtrengthens the lungs exceedingly. Country people give it to their cattle when they are troubled with the cough, or broken winded.

## ALE-HOOF, OR GROUND-IVY.

SEVERAL countries give it ſeveral names, ſo that there is ſcarcely an herb growing of that bigneſs that hath got ſo many: it is called cat's-foot, ground-ivy, gill-go-by-ground and gill-creep-by-ground, tun-hoof, hay-maids, and ale-hoof.

**Description.** This well-known herb lieth, ſpreadeth, and creepeth, upon the ground, ſhooting forth roots at the corners of the tender-jointed ſtalks, ſet all along with two round leaves at every joint, ſomewhat hairy, crumpled, and unevenly dented about the edges, with round dents: at the joints likewiſe with the leaves, towards the ends of the branches, come forth hollow long flowers, of a bluiſh purple colour, with ſmall white ſpots upon the lips that hang down. The root is ſmall, with ſtrings.

**Place.** It is commonly found under the hedges, and on the ſides of ditches, under houſes, or in ſhadowed lanes, and other waſte grounds, in almoſt every part of the land.

**Time.** They flower ſomewhat early, and abide ſo a great while; the leaves continue green until winter, and ſometimes abide, except the winter be very ſharp and cold.

Government and Virtues. It is an herb of Venus, and therefore cures the diſeaſes ſhe cauſes by ſympathy, and thoſe of Mars by antipathy. You may uſually find it all the year long, except the weather be extreme froſty. It is quick, ſharp, and bitter, in taſte, and is thereby found to be hot and dry; a ſingular herb for all inward wounds, ulcerated lungs or other parts, either by itſelf or boiled with other like herbs; and, being drunk, it in a ſhort time eaſeth all griping pains, windy and choleric humours in the ſtomach, ſpleen, or belly; helps the yellow jaundice by opening the ſtoppings of the gall and liver, and melancholy by opening the ſtoppings of the ſpleen; expelleth venom or poiſon, and alſo the plague; it provoketh urine and women's courſes. The decoction of it in wine, drunk for ſome time together, procureth eaſe unto them that are troubled with the ſciatica, or hip-gout, as alſo the gout in the hands, knees, or feet; and, if you put to the decoction ſome honey, and a little burnt allum, it is excellent good to gargle any ſore mouth or throat, and to waſh the ſores and ulcers in the privy parts of man or woman; it ſpeedily helpeth green wounds, being bruiſed and bound thereto. The juice of it, boiled with a little honey and verdigreaſe, doth wonderfully cleanſe fiſtulas, ulcers, and ſtayeth the ſpreading or eating of cancers and ulcers; it helpeth the itch, ſcabs, wheals, and other breakings-out in any part of the body. The juice of celandine, field-daiſies, and ground-ivy, clarified, and a little fine ſugar diſſolved therein, and dropped into the eyes, is a ſovereign remedy for all the pains, redneſs, and watering, of them; as alſo for the pin and web, ſkins and films growing over the ſight. It helpeth beaſts as well as men. The juice dropped into the ears doth wonderfully help the noiſe and ſinging of them, and helpeth the hearing which is decayed. It is good to tun up with new drink, for it will ſo clarify it in a night, that it will be fit to be drunk the next morning; or if any drink be thick with removing, or any other accident, it will do the like in a few hours.

## ALEXANDER.

IT is alſo called aliſander, horſe-parſley, and wild-parſley, and the black pot-herb: the ſeed of it is that which is uſually ſold in the apothecaries ſhops for Macedonian parſley-ſeed.

Description. It is uſually ſown in all the gardens in Europe, and ſo well known that it needs no further deſcription.

Time. They flower in June and July, and the ſeed is ripe in Auguſt.

Government and Virtues. It is an herb of Jupiter, and therefore friendly to nature, for it warmeth a cold ſtomach, and openeth ſtoppings of the liver, and wonderfully helpeth the ſpleen; it is good to remove women's courſes, to expel the after-birth, to break wind, to provoke urine, and help the ſtranguary; and theſe things the ſeeds will do likewiſe. If either of them be boiled in wine, or be bruiſed and taken in wine, it is alſo effectual againſt the biting of ſerpents. And now you know what alexander pottage is good for, that you may no longer eat it out of ignorance, but out of knowledge.

## BLACK ALDER TREE.

DESCRIPTION AND NAMES. THIS groweth up like a ſmall ſhrub, or buſh, and ſpreads in many branches; the wood is white, and red at the core, the bark blackiſh with white ſpots, the inner bark yellow, the leaves ſomewhat like the common alder; the flowers are white, and come forth at the joints with the leaves; the berries are round, firſt green, then red, and black when they are ripe. The Latins call it *frangula*, and *alnus nigra baccifera*; in Hampſhire it is uſually known by the name of dog-wood.

PLACE. This tree or ſhrub may be found plentifully in St. John's wood by Hornſey, and in the woods upon Hampſtead-heath, as alſo at a wood called the Old Park at Barcomb in Suſſex, near the brook's ſide.

TIME. It flowereth in May, and the berries are ripe in September.

GOVERNMENT AND VIRTUES. It is a tree of Saturn. The inner bark thereof purgeth downwards both choler and phlegm, and the watery humours of ſuch as have the dropſy, and ſtrengtheneth the inward parts again by binding. The green leaves of this tree, applied to tumours, diſcuſſes them, and takes off inflammations. Being put into travellers ſhoes, they eaſe pain, and remove wearineſs. A black colour like ink is made with the bark of alder rubbed off with a ruſty iron, and infuſed in water for ſome days. Some uſe it to dye. If the bark hereof be boiled with agrimony, wormwood, dodder, hops, and ſome fennel, with ſmallage, endive, and ſuccory roots, and a reaſonable draught taken every morning for ſome time together, it is very effectual againſt the jaundice, dropſy, and the evil diſpoſition of the body: eſpecially if ſome ſuitable purging medicine have been taken before to avoid the groſſer excrements; it purgeth and ſtrengtheneth the liver and ſpleen, cleanſing them from ſuch evil humours and hardneſs as they are afflicted with. It is to be underſtood, that theſe things are performed by the dried bark; for the freſh green bark, taken inwardly, provoketh ſtrong vomitings, pains in the ſtomach, and gripings in the belly: yet, if the decoction ſtand and ſettle two or three days, until the yellow colour be changed black, it will not work ſo ſtrongly as before, but will ſtrengthen the ſtomach, and procure an appetite to meat. The outer bark contrarywiſe doth bind the body, and is helpful for all laſks and fluxes thereof; but this muſt alſo be dried firſt, whereby it will work the better. The inner bark thereof boiled in vinegar, is an approved remedy to kill lice, to cure the itch, and take away ſcabs by drying them up in a ſhort time; it is ſingularly good to waſh the teeth, to take away the pains, to faſten thoſe that are looſe, to cleanſe them and keep them ſound. The leaves are good fodder for kine, to make them give more milk.

If in the ſpring-time you uſe the herbs before-mentioned, and will but take a handful of each of them, and to them add a handful of elder-buds, and, having bruiſed them all, boil them in a gallon of ordinary beer when it is new, and, having boiled them half an hour, add to this three gallons more, and let them work together, and drink a draught of it every morning, half a pint or thereabouts,---it is an excellent purge for the ſpring, to conſume the phlegmatic quality the winter hath left behind it, and withal keep your body in health, and conſume thoſe evil humours which the heat of ſummer will readily ſtir up.

## COMMON ALDER TREE.

Description. IT groweth to a reaſonable height, and ſpreads much if it likes the place. It is generally ſo well known unto the country people, that I conceive it needleſs to tell them that which is no news.

Place and Time. It delighteth to grow in moiſt woods and watery places; flowering in April or May, and yielding the ſeed in September.

Government and Use. It is a tree under the dominion of Venus, and of ſome watery ſign or other, I ſuppoſe Piſces; and therefore the decoction or diſtilled water of the leaves is excellent againſt burnings and inflammation, either with wounds or without, to bathe the place grieved with, and eſpecially for that inflammation in the breaſt which the vulgar call an ague. If you cannot get the leaves (as in winter it is impoſſible), make uſe of the bark in the ſame manner. The leaves and bark of the alder-tree are cooling, drying, and binding. The freſh leaves laid upon ſwellings diſſolveth them, and ſtayeth the inflammations; the leaves, put under the bare feet galled with travelling, are a great refreſhing to them; the ſaid leaves gathered while the morning dew is on them, and brought into a chamber troubled with fleas, will gather them thereinto, which, being ſuddenly caſt out, will rid the chamber of thoſe troubleſome bed-fellows.

ANGE-

## ANGELICA.

THAT is, the *angelical* or *angel-like herb*. On what occaſion this excellent name was firſt given unto it, I know not; unleſs it was for the excellent virtues thereof, or for that God made it known to man by the miniſtry of an angel. I ſuppoſe the former caſe rather to be true: however, as I am not able to prove the other, ſo I think no man can give any good reaſon to the contrary. For this we know, that God hath made his angels miniſtering ſpirits, to ſerve us for the ſafeguard of our ſouls, and alſo of our bodies. But, upon what occaſion ſoever the name was given, it is excellent, and ſo are its properties.---Angelica is hot and dry at leaſt in the third degree. All the latter writers agree upon this, and experience proveth the ſame, that it is good againſt poiſon, peſtilent airs, and the peſtilence itſelf. The practitioners of Germany write thus of it:---If any man be ſuddenly taken either with the peſtilence, or with any peſtilent ague, with too much ſweating, let him drink of the powder of the root half a drachm, mingled with a drachm of treacle, in three or four ſpoonfuls of the water of angelica, diſtilled from the roots, and, after his going to bed, covering himſelf well, let him faſt, at leaſt, three hours after; which if he do, he will begin to ſweat, and, by the help of God, he will be cured of his diſeaſe. For want of treacle, one may take a whole drachm of the root of angelica in powder with ſo much of the diſtilled water as aforeſaid, and it will have the ſame effect.---The root of angelica well ſteeped in vinegar, and ſmelt to in time of the peſtilence. and the ſame liquor being ſometimes drunk faſting, preſerveth from infection. But, in my judgment, it is better to take an orange or a lemon, cut off the top, pick out the meat, prick it full of ſmall holes, put into it a piece of ſponge, or fine linen cloth dipped in the aforeſaid vinegar, and ſmell to it.---The water diſtilled out of the roots of angelica, or the powder of the ſame, is good againſt gnawing and pains of the belly occaſioned by cold, if the body be not bound. It is good againſt all inward diſeaſes, as pleuriſy, in the beginning before the heat of the inflammation be come into the body; for that it diſſolveth and ſcattereth abroad ſuch humours as uſe to cauſe the pleuriſy. Moreover it is good for the diſeaſes of the lungs, if they come of a cold cauſe; and from the ſtrangurian, if from a cold cauſe, or of a ſtopping. It is good for a woman that is in travail. It expelleth wind that is in the body, and eaſeth the pain that cometh from the ſame. The root may be ſod in wine or water, as the nature of the ſick requireth. The root or the juice, put into an hollow tooth, taketh away the ach; the ſame effect hath the diſtilled water, being put into the ear. The juice or water of angelica quickens the eye-ſight, and breaks the little films that cover the eyes, cauſing darkneſs of ſight. Of the roots of angelica and pitch may be made a good plaiſter againſt the bitings of mad beaſts. The water, the juice, or the powder, of this root, ſprinkled upon the diſeaſed place, is a very good remedy againſt old and deep ſores, for they ſcour and cleanſe them, and cover the bones with fleſh. The water of the ſame, in a cold cauſe, is good to be laid on places diſeaſed with the gout and ſciatica; for it eaſeth the pain, and melteth away the tough humours that are gathered together. The ſeed is of like virtue with the root. The wild angelica, that groweth here in the low woods, and by the water-ſide, is not of ſuch virtue as the other; howbeit the ſurgeons ſeeth the root of it in wine to heal green wounds. Theſe properties I have gathered out of German writers. I have not as yet proved them all myſelf; but divers of them I have proved, and have found them to be true. I have ſet down the peel of an orange, or lemon; the meat whereof is alſo commended by the phyſicians to be a good preſervative both againſt poiſon and the infection of peſtilence.---Late writers affirm that the roots of angelica are oppoſite to all poiſon and infection. If any be infected with the plague, or poiſoned, they give him immediately to drink a drachm of the powder of this root with wine in the winter, and in ſummer with diſtilled water of carduus benedictus; then get him to bed, and cover him until he ſweat freely. The ſame root being taken faſting in the morning, or but held in the mouth, doth keep and preſerve the body from the evil of the air. The leaves of angelica pounded with the leaves of rue and honey are very good to be laid to the bitings of mad dogs preſently after the hurt, the wine being drunk wherein the root or leaves of angelica hath been boiled.

There is both garden and wild angelica; ſome alſo reckon up a water kind; it groweth up with great hollow ſtalks, four or five feet high, having broad divided leaves, of a pale green colour; at the top cometh forth large umbels of white flowers, after which ſucceed flat ſeed, ſomewhat whitiſh; the root periſheth every year if it be ſuffered to ſeed.

PLACE AND TIME. Angelica is Latin and Engliſh; it grows commonly in our gardens, and wild alſo in many places; flowers about July, and the ſeed is ripe ſoon after.

GOVERNMENT AND VIRTUES. It is an herb of the Sun in Leo; let it be gathered when he is there, the Moon applying to his good aſpect; let it be gathered either in his hour, or in the hour of Jupiter; let Sol be angular. Obſerve the like in gathering the herbs of other planets, and you may happen to do wonders. In all epidemical diſeaſes cauſed by Saturn, this is as good a preſervative as grows; it reſiſts poiſon by defending and comforting the heart, blood, and ſpirits; it doth the like againſt the plague and all epidemical diſeaſes, if the root be taken in powder to the weight of half a drachm at a time with ſome good treacle in carduus water, and the party thereupon laid to ſweat in his bed; if treacle be not to be had, take it alone in carduus or angelica water. The ſtalks or roots, candied and eaten faſting, are good preſervatives in time of infection, and at other times to warm and comfort a cold ſtomach. The root alſo ſteeped in vinegar, and a little of that vinegar taken ſometimes faſting, and the root ſmelled unto, is good for the ſame purpoſe. A water diſtilled from the root ſimply, or ſteeped in wine, and diſtilled in glaſs, is much more effectual than the water of the leaves; and this water, drunk two or three ſpoonfuls at a time, eaſeth all pains and torments coming of cold and wind, ſo as the body be not bound; and, taken with ſome of the root in powder at the beginning, helpeth the pleuriſy, as alſo all other diſeaſes of the lungs and breaſt, as coughs, phthyſic, and ſhortneſs of breath; and a ſyrup of the ſtalks doth the like. It helps pains of the cholic, the ſtranguary, and ſtopping of the urine, procureth women's courſes, and expelleth the after-birth; openeth the ſtoppings of the liver and ſpleen, and briefly eaſeth and diſcuſſeth all windineſs and inward ſwellings. The decoction drunk before the fit of an ague, that they may ſweat, if poſſible, before the fit comes on, will in two or three times taking rid it quite away. It helps digeſtion, and is a remedy for a ſurfeit. The juice, or the water, being dropped into eyes or ears, helps dimneſs of ſight and deafneſs; the juice, being put into hollow teeth, eaſeth their pains. The roots in powder, made up into a plaiſter with a little pitch, and laid on the biting of a mad dog, or any other venomous creature, doth wonderfully help. The juice, or water, dropped, or tents wet therein, and put into old filthy deep ulcers, or the powder of the root, in want of either, doth cleanſe and cauſe them to heal quickly, by covering the naked bones with fleſh. The diſtilled water, applied to places pained with the gout or ſciatica, doth give a great deal of eaſe.

The wild angelica is not ſo effectual as the garden, although it may be ſafely uſed to all the purpoſes aforeſaid.

## AMARANTHUS.

BESIDES this common name, by which it is beſt known by the floriſts of our days, it is alſo called flower-gentle, flower-velure, floramor, and velvet-flower.

Description. It being a garden flower, and well known to every one that keeps of it, I might forbear the deſcription; yet notwithſtanding, becauſe ſome deſire it, I ſhall give it.---It runneth up with a ſtalk a cubit high, ſtreaked, and ſomewhat reddiſh towards the root, but very ſmooth, divided towards the top with ſmall branches, among which ſtand long broad leaves of a reddiſh green colour, and ſlippery. The flowers are not properly flowers, but tufts, very beautiful to behold, but of no ſmell, of a reddiſh colour; if you bruiſe them, they yield juice of the ſame colour; being gathered, they keep their beauty a long time; the ſeed is of a ſhining black colour.

Time. They continue in flower from Auguſt till the froſts nip them.

Government and Virtues. It is under the dominion of Saturn, and is an excellent qualifier of the unruly actions and paſſions of Venus, though Mars alſo ſhould join with her. The flowers, dried, and beaten into powder, ſtop the terms in women, and ſo do almoſt all other red things. And by the icon or image of every herb the ancients at firſt found out their virtues. Modern writers laugh at them for it; but I wonder in my heart how the virtue of herbs came at firſt to be known, if not by their ſignatures; the moderns have them from the writings of the ancients, the ancients had no writings to have them from. But to proceed: the flowers ſtop all fluxes of blood whether in man or woman, bleeding either by the noſe or wound. There is alſo a ſort of amaranthus which bears a white flower, which ſtops the whites in women, and the running of the reins in men, and is a moſt ſingular remedy for the venereal diſeaſe.

## ANEMONE.

CALLED alſo wind-flower, becauſe they ſay the flowers never open but when the wind bloweth: Pliny is my author; if it be not ſo, blame him. The ſeed alſo, if it bears any at all, flies away with the wind.

Place and Time. They are ſown uſually in the gardens of the curious, and flower in the ſpring-time. As for the deſcription, I ſhall paſs it, they being well known to all thoſe that ſow them.

Government and Virtues. It is under the dominion of Mars, being ſuppoſed to be a kind of crow-foot. The leaves provoke the terms mightily, being boiled and the decoction drunk. The body being bathed with the decoction of them cures the leproſy. The leaves being ſtamped, and the juice ſnuffed up the noſe, purgeth the head greatly: ſo doth the root being chewed in the mouth, for it cauſeth much ſpitting; and bringeth away many watery and phlegmatic humours, and is therefore excellent for the lethargy. And, when all is done, let phyſicians ſay what they pleaſe, all the pills in the diſpenſatory purge not the head like to hot things held in the mouth: being made into an ointment, and the eyelids anointed therewith, it helps inflammations of the eyes, whereby it is palpable that every ſtronger draweth its weaker light; the ſame ointment is exceeding good to cleanſe malignant and corroding ulcers.

## GARDEN ARRACH.

CALLED alſo orach, and orage.

Description. It is ſo commonly known to every houſewife, it were but labour loſt to deſcribe it.

Time. It flowereth and ſeedeth from June to the end of Auguſt.

Government and Virtues. It is under the government of the Moon; in quality cold and moiſt like unto her. It ſofteneth and looſeneth the body of man being eaten, and fortifieth the expulſive faculty in him. The herb, whether it be bruiſed and applied to the throat, or boiled, and in like manner applied, it matters not much, it is excellent good for ſwellings in the throat; the beſt way I ſuppoſe is to boil it, and, having drunk the decoction inwardly, apply the herb outwardly; the decoction of it beſides is an excellent remedy for the yellow jaundice.

## ARRACH WILD AND STINKING.

CALLED alſo vulvaria, from that part of the body upon which its operation is moſt: alſo dog's arrach, goat's arrach, and ſtinking motherwort.

Description. This hath ſmall and almoſt round leaves, yet a little pointed, and without dent or cut, of a duſky mealy colour, growing on the ſlender ſtalks and branches that ſpread on the ground, with ſmall flowers in cluſters ſet with the leaves, and ſmall ſeeds ſucceeding like the reſt, periſhing yearly, and riſing again with its own ſowing. It ſmells like old rotten fiſh, or ſomething worſe.

Place. It grows uſually upon dunghills.

Time. They flower in June and July, and the ſeed is ripe quickly after.

Government and Virtues. Stinking arrach is uſeful as a remedy to help women pained and almoſt ſtrangled with the mother, by ſmelling to it; but inwardly taken there is not a better remedy under the moon for that diſeaſe. I would be large in commendation of this herb, were I but eloquent. It is an herb under the dominion of Venus, and under the ſign Scorpio. The works of God are given freely to man; his medicines are common and cheap, and eaſy to be found: the medicines of the college of phyſicians are dear, and ſcarce to find. I commend this for an univerſal medicine for the womb, and ſuch a medicine as will eaſily, ſafely, and ſpeedily, cure any diſeaſe thereof, as the fits of the mother, diſlocation, or falling out thereof; it cools the womb being over-heated; and let me tell you this, and I will tell you but the truth, heat of the womb is one of the greateſt cauſes of hard labour in child-birth. It makes barren women fruitful, it cleanſeth the womb if it be foul, and ſtrengthens it exceedingly; it provokes the terms if they be ſtopped, and ſtops them if they flow immoderately: you can deſire no good to your womb but this herb will effect it; therefore, if you love children, if you love health, if you love eaſe, keep a ſyrup always by you made of the juice of this herb and ſugar, or honey if it be to cleanſe the womb; and let ſuch as be rich keep it for their poor neighbours, and beſtow it as freely as I beſtow my ſtudies upon them, or elſe let them look to anſwer for it another day when the Lord ſhall come to make inquiſition of blood.

## ARCHANGEL.

TO put a gloſs upon their practice, the phyſicians call an herb, which country people vulgarly know by the name of dead nettles, archangel, wherein whether they ſavour more of ſuperſtition or folly I leave to the judicious reader. There is more curioſity than courteſy to my countrymen uſed by others in the explanation as well of the names as deſcription of this well-known herb: which, that I may not alſo be guilty of, take this ſhort deſcription; firſt, of the red archangel.

Description. This hath divers ſquare ſtalks, ſomewhat hairy, at the joints whereof grow two ſad-green leaves dented about the edges, oppoſite each other, the lowermoſt upon long footſtalks, but without any towards the tops, which are ſomewhat round, yet pointed, and a little crumpled and hairy: round about the upper joints, where the leaves grow thick, are ſundry gaping flowers of a pale reddiſh colour; after which come the ſeeds, three or four in a huſk. The root is ſmall and thready, periſhing every year; the whole plant hath a ſtrong ſcent, but not ſtinking.

White archangel hath divers ſquare ſtalks, none ſtanding upright, but bending downward, whereon ſtand two leaves at a joint, larger and more pointed than the other, dented about the edges, and greener alſo, more like unto nettle-leaves, but not ſtinging, yet hairy: at the joints, with the leaves, ſtand larger and more open gaping white flowers, in huſks round about the ſtalks, (but not with ſuch a buſh of leaves and flowers ſet in the top as is on the other,) wherein ſtand ſmall roundiſh black ſeeds. The root is white, with many ſtrings at it, not growing downward, but lying under the upper cruſt of the earth, and abideth many years increaſing, This hath not ſo ſtrong a ſcent as the former.

Yellow archangel is like the white in the ſtalks and leaves, but that the ſtalks are more ſtraight and upright, and the joints with leaves are farther aſunder, having longer leaves than the former, and the flowers a little larger and more gaping, of a fair yellow colour in moſt, in ſome paler. The roots are like the white, only they creep not ſo much on the ground.

Place. They grow almoſt every where, unleſs it be in the middle of the ſtreet; the yellow moſt uſually in the wet grounds of woods, and ſometimes in the dryer, in divers counties of this nation.

Time. They flower from the beginning of the ſpring all the ſummer long.

Virtues and Use. The archangels are ſomewhat hot, and dryer than the ſtinging nettles, and uſed with better ſucceſs, for the ſtopping and hardneſs of the ſpleen, than they, by uſing the decoction of the herb in wine, and afterwards applying the herb hot unto the region of the ſpleen as a plaiſter, or the decoction with ſpunges. The flowers of the white archangel are preſerved, or conſerved, to be uſed to ſtay the whites, and the flowers of the red to ſtay the reds, in women.

## ARSESMART.

THE hot arſeſmart is called alſo water-pepper, and culrage; the mild arſeſmart is called dead arſeſmart, porcicaria, or peach-wort, becauſe the leaves are ſo like the leaves of peach-tree; it is alſo called plumbago.

Description of the Mild. This hath broad leaves ſet at the great red joints of the ſtalks, with ſemicircular blackiſh marks on them uſually, yet ſometimes without. The flowers grow in long ſpikes uſually, either bluiſh or whitiſh, with ſuchlike ſeed following. The root is long, with many ſtrings thereat, periſhing yearly; this hath no ſharp taſte, as another ſort hath, which is quick and biting, but rather ſour like ſorrel, or elſe a little drying or without taſte.

Place. It grows in watery places, ditches, and the like; which for the moſt part are dry in ſummer.

Time. It flowereth in June, and the ſeed is ripe in Auguſt.

Government and Virtues. As the virtues of both theſe is various, ſo are alſo their government; for that which is hot and biting is under the dominion of Mars, but Saturn challengeth the other, as appears by the lead-coloured ſpot he hath placed upon the leaf. The water-arſeſmart is of great uſe in the ſtone of the kidneys or bladder, a draught of it being taken every morning for two or three months together. A country gentleman uſed a load of this herb in a year to make the water, wherewith he cured many of the ſtone. The root or ſeed, put into an aching hollow tooth, takes off the pain. There is ſcarce any thing more effectual to drive away flies, for, whatever wounds or ulcers cattle have, if they are anointed with the juice of arſeſmart, the flies will not come near, though it is the heat of ſummer. It is of a cooling and drying quality, and very effectual for putrefied ulcers in man or beaſt, to kill worms, and cleanſe the putrefied places. The juice thereof dropped in, or otherwiſe applied, conſumeth all cold ſwellings, and diſſolveth the congealed blood of bruiſes by ſtrokes, falls, &c. The leaves bruiſed, and laid to the joint that hath a fellon thereon, taketh it away. The juice deſtroyeth worms in the ears, being dropped into them: if the hot arſemart be ſtrewed in a chamber, it will ſoon kill all the fleas, and drive away the flies, in the hotteſt time of ſummer; a good handful of the hot biting arſeſmart, put under a horſe's ſaddle, will make him travel the better, although he were half tired before: the mild arſemart is good againſt hot impoſthumes and inflammations at the beginning, and to heal green wounds.

All authors chop the virtues of both ſorts of arſeſmart together, as men chop herbs for the pot, when both of them are of quite contrary qualities. The hot arſeſmart groweth not ſo high, or tall, as the mild doth, but hath many leaves of the colour of peach-leaves, very ſeldom or never ſpotted; in other particulars it is like the former, but may be eaſily known from it, if you will be but pleaſed to break a leaf of it acroſs your tongue, for the hot will make your tongue to ſmart, but the cold will not. If you ſee them both together, you may eaſily diſtinguiſh them, becauſe the mild hath far broader leaves: and our college of phyſicians, out of their learned care for the public good, *Anglice*, their own gain, miſtake the one for the other in their New Maſterpiece, whereby they diſcover, 1. Their ignorance; 2. Their careleſsneſs; and he that hath but half an eye may ſee their pride without a pair of ſpectacles. I have done what I could to diſtinguiſh them in their virtues; and, when you find not the contrary named, uſe the cold.

## ASARABACCA.

DESCRIPTION. ASARABACCA hath many heads riſing from the roots, from whence come many ſmooth leaves, every one upon his own footſtalk, which are rounder and bigger than violet-leaves, thicker alſo, and of a dark-green ſhining colour on the upper-ſide, and of a paler yellow-green underneath, little or nothing dented about the edges, from among which riſe ſmall, round, hollow, brown, green, huſks, upon ſhort ſtalks about an inch long, divided at the brims into five diviſions, very like the cups or heads of the henbane ſeed, but that they are ſmaller, and theſe are all the flowers it carrieth, which are ſomewhat ſweet, being ſmelled unto, and wherein when they are ripe is contained ſmall cornered rough ſeeds, very like the kernels or ſtones of grapes or raiſins. The roots are ſmall and whitiſh, ſpreading divers ways in the ground, and increaſing into divers heads, but not running or creeping under the ground as ſome other creeping herbs do. They are ſomewhat ſweet in ſmell, reſembling nardus, but more when they are dry than green; and of a ſharp, but not unpleaſant, taſte.

Place. It groweth frequently in gardens.

Time. They keep their leaves green all the winter, but ſhoot forth new in the ſpring, and with them come forth thoſe heads or flowers which give ripe ſeed about midſummer, or ſomewhat after.

Government and Virtues. It is a plant under the dominion of Mars, and therefore inimical to nature. This herb, being drunk, not only provoketh vomiting, but purgeth downward, and by urine alſo, purging both choler and phlegm: if you add to it ſome ſpikenard with the whey of goat's milk, or honeyed water, it is made more ſtrong; but it purgeth phlegm more manifeſtly than choler, and therefore doth much help pains in the hips and other parts. Being boiled in whey, it wonderfully helpeth the obſtruction of the liver and ſpleen, and is therefore profitable for the dropſy and jaundice, being ſteeped in wine and drunk. It helps thoſe continual agues that come by the plenty of ſtubborn humours: an oil made thereof by ſetting it in the ſun, with ſome laudanum added to it, provoketh ſweating, the ridge of the back being anointed therewith, and thereby driveth away the ſhaking fits of the ague. It will not abide any long boiling, for it loſeth its chief ſtrength thereby; nor much beating, for the finer powder doth provoke vomits and urine, and the coarſer purgeth downwards. The common uſe hereof, is to take the juice of five or ſeven leaves in a little drink to cauſe vomitings; the roots have alſo the ſame virtue, though they do not operate ſo forcibly, yet they are very effectual againſt the biting of ſerpents, and therefore are put as an ingredient both into mithridate and Venice treacle. The leaves and roots being boiled in lye, and the head often waſhed therewith while it is warm, comforteth the head and brain that is ill-affected by taking cold, and helpeth the memory.

I ſhall deſire ignorant people to forbear the uſe of the leaves: the roots purge more gently, and may prove beneficial in ſuch as have cancers, or old putrefied ulcers, or fiſtulas, upon their bodies, to take a drachm of them in powder in a quarter of a pint of white wine in the morning. The truth is, I fancy purging and vomiting medicines as little as any man breathing, for they weaken nature, nor ſhall ever adviſe them to be uſed unleſs upon urgent neceſſity. If a phyſician be nature's ſervant, it is his duty to ſtrengthen his miſtreſs as much as he can, and weaken her as little as may be.

## ASPARAGUS, SPARAGUS, OR SPERAGE.

Description. IT riſeth up at firſt with divers white-green ſcaly heads, very brittle or eaſy to break while they are young, which afterwards riſe up in very long and ſlender green ſtalks, of the bigneſs of an ordinary riding-wand at the bottom of moſt, or bigger or leſs, as the roots are of growth; on which are ſet divers branches of green leaves, ſhorter and ſmaller than fennel to the top; at the joints whereof come forth ſmall moſſy yellowiſh flowers, which turn into round berries, green at the firſt, and of an excellent red colour when they are ripe, ſhewing like beads of coral, wherein are contained exceeding hard black ſeeds. The roots are diſperſed from a ſpongeous head into many long, thick, and round, ſtrings, whereby it ſucketh much nouriſhment out of the ground, and encreaſeth plentifully thereby.

## PRICKLY ASPARAGUS, SPARAGUS, OR SPERAGE.

DESCRIPTION. IT groweth uſually in gardens, and ſome of it grows wild in Appleton-meadow, in Glouceſterſhire, where the poor people do gather the buds, or young ſhoots, and ſell them cheaper than our garden aſparagus is ſold in London.

TIME. They do for the moſt part flower, and bear their berries, late in the year, or not at all, although they are houſed in winter.

GOVERNMENT AND VIRTUES. They are both under the dominion of Jupiter. The young buds or branches, boiled in ordinary broth, make the belly ſoluble and open, and, boiled in white wine, provoke urine, being ſtopped, and are good againſt the ſtranguary, or difficulty of making water. It expelleth the gravel and ſtone out of the kidneys, and helpeth pains in the reins: if boiled in white wine or vinegar, it is prevalent for them that have their arteries looſened, or are troubled with the hip-gout, or ſciatica. The decoction of the roots, boiled in wine and taken, is good to clear the ſight, and, being held in the mouth, eaſeth the tooth-ach; and, being taken faſting ſeveral mornings together, ſtirreth up bodily luſt in man or woman, whatſoever ſome have written to the contrary. The garden aſparagus nouriſheth more than the wild, yet it hath the ſame effect in all the aforementioned diſeaſes. The decoction of the roots in white wine, and the back and belly bathed therewith, or kneeling or lying down in the ſame, or ſitting therein as a bath, hath been found effectual againſt pains of the reins and bladder, pains of the mother and cholic, and generally againſt all pains that happen to the lower parts of the body; and is no leſs effectual againſt ſtiff and benumbed ſinews, or thoſe that are ſhrunk by cramps and convulſions; it alſo helpeth the ſciatica.

## ASH-TREE.

THIS is ſo well known, that time would be miſ-ſpent in writing a deſcription of it; and therefore I ſhall only inſiſt upon the virtues of it.

Government and Virtues. It is governed by the ſun, and the young tender tops with the leaves taken inwardly, and ſome of them outwardly applied, are ſingularly good againſt the biting of the viper, adder, or any other venomous beaſt: and the water diſtilled therefrom, being taken in a ſmall quantity every morning faſting, is a ſingular medicine for thoſe that are ſubject to the dropſy, or to abate the greatneſs of thoſe who are too groſs or fat. The decoction of the leaves in white wine, helpeth to break the ſtone and expel it, and cureth the jaundice. The aſhes of the bark of the aſh made into lye, and thoſe heads bathed therewith which are leprous, ſcabby, or ſcald, are thereby cured. The kernels within the huſks, commonly called aſhen keys, prevail againſt ſtitches and pains in the ſide, proceeding from wind, and voideth the ſtone by provoking urine.

## AVENS, called alſo CLOVEWORT, and HERB BENET.

Decription. THE ordinary avens hath many long, rough, dark-green, winged leaves, riſing from the root, every one made of many leaves, ſet on each ſide of the middle-rib, the largeſt three whereof grow at the end, and are ſnipped or dented round about the edges; the other being ſmall pieces, ſometimes two, and ſometimes four, ſtanding on each ſide of the middle-rib underneath them: among which do riſe up divers rough or hairy ſtalks, about two feet high, branching forth with leaves at every joint, not ſo long as thoſe below, but almoſt as much cut in on the edges, ſome into three parts, ſome into more. On the tops of the branches ſtand ſmall pale yellow flowers, conſiſting of five leaves, like the flowers of cinquefoil, but larger, in the middle whereof ſtandeth a ſmall green head, which when the flower is fallen groweth rough and round, being made of many long greeniſh purple ſeeds, like grains, which will ſtick upon your clothes. The root conſiſts of many browniſh ſtrings or fibres, ſmelling ſomewhat like unto cloves, eſpecially thoſe which grow in the higher, hotter, and drier, grounds, and in the free and clear air.

Place. They grow wild in many places under hedge-ſides, and by the pathways in fields; yet they rather delight to grow in ſhadowy than ſunny places.

Time. They flower in May and June for the moſt part, and their ſeed is ripe in July at the lateſt.

Government and Virtues. It is governed by Jupiter, and that gives hope of a wholeſome healthful herb. It is good for the diſeaſes of the cheſt or breaſt, for pains and ſtitches in the ſides, and to expel crude and raw humours from the belly and ſtomach, by the ſweet ſavour and warming quality; it diſſolveth the inward congealed blood, occaſioned by falls or bruiſes, and the ſpitting of blood, if the roots, either green or dried, be boiled in wine and drunk; as alſo all manner of inward or outward wounds, if they be waſhed or bathed therewith. The decoction alſo, being drunk, comforteth the heart, and ſtrengtheneth the ſtomach, and a cold brain, and therefore is good in the ſpring time to open obſtructions of the liver, and helpeth the wind cholic: it alſo helpeth thoſe that have fluxes, or are burſten, or have a rupture; it taketh away ſpots and marks in the face, being waſhed therewith. The juice of the freſh root or powder of the dried root hath the ſame effect with the decoction. The root in the ſpring time ſteeped in wine, doth give it a delicate ſavour and taſte; and, being drunk faſting every morning, comforteth the heart, and is a good preſervative againſt the plague, or any other poiſon; it helpeth digeſtion, and warmeth a cold ſtomach, and openeth obſtructions of the liver and ſpleen. It is very ſafe, you need have no doſe preſcribed; and is very fit to be kept in every body's houſe.

## ALMOND-TREE.

Description and Names. OF this tree there are two kinds, the one bears ſweet fruit, the other bitter; they grow bigger than any peach-tree; I have ſeen a bitter almond-tree in Hampſhire, as big as a great plumb-tree. It hath leaves much like peach-leaves, and is called in Latin amigdalum; they grow plentifully in Turkey and Barbary.

Nature and Virtues. The ſweet almonds are hot and moiſt in the firſt degree, the bitter dry in the ſecond. It is a plant of Jupiter. The ſweet almonds nouriſh the body, and increaſe the ſeed; they ſtrengthen the breath, cleanſe the kidneys, and open the paſſages of urine. There is a fine pleaſant oil drawn out of the ſweet almonds which being taken with ſugar-candy is excellent againſt dry coughs and hoarſeneſs; it is good for thoſe that have any inward ſore, and for ſuch as are troubled with the ſtone, becauſe it makes ſlippery the paſſages of the urine. Bitter almonds alſo open obſtructions of the liver and ſpleen, cleanſe the lungs from phlegm, provoke urine; they expel wind, and provoke womens' courſes; the oil of them kills worms, and helps pains of the womb. Some write that bitter almonds preſerve from drunkenneſs, five or ſix being eaten faſting; the oil of both cleanſes the ſkin; it eaſeth pains of the head, the temples being anointed therewith; and the oil, with honey, powder of liquorice, oil of roſes, and white wax, makes a good ointment for dimneſs of ſight. Alſo almond butter is very good for a ſtuffed breaſt; this kind of butter is made of almonds with ſugar and roſe-water, which being eaten with violets is very wholeſome and commodious for ſtudents; for it rejoiceth the heart, comforteth the brain, and qualifies the heat of the liver.

## ACONITUM.

OF this there are two ſorts, the one bearing blue flowers, the other yellow; it is alſo called wolf's bane, and the blue is generally known by the name of monk's hood.

Description. The wolf's bane which beareth the blue flower, is ſmall, but groweth up a cubit high, the leaves are ſplit and jagged, the flowers in long rows towards the tops of the ſtalks, gaping like hoods; on the hoary root groweth as it were a little knob, wherewith it ſpreadeth itſelf abroad, and multiplieth.

Place. The monk's hood or blue wolf's bane is very common in many gardens, the other rarely found but in the gardens of ſome curious herbariſts; but groweth in foreſts and dark low woods and valleys in ſome parts of Germany and France.

Time. They flower in April, May, and June.

Government and Danger. Theſe plants are hot and dry in the fourth degree, of a martial venomous quality; if it be inwardly taken, it inflameth the heart, burneth the inward parts, and killeth the body. Dodonæus reporteth of ſome men at Antwerp, who unawares did eat ſome of the monk's hood in a ſallad, inſtead of ſome other herb, and died forthwith: this I write that people who have it in their gardens might beware of it.

## ALOE, or ALOES.

Names. BY the ſame name of aloe or aloes is the condenſed juice of this plant called in all parts of Europe; the plant is alſo called ſea-houſleek and ſea-ay-green.

Description. This plant hath very long leaves, thick, and ſet round about with ſhort points or creſts, ſtanding wide one from another; the root is thick and long; all the herb is of a ſtrong ſavour, and bitter taſte; out of this herb is drawn a juice, which is dried, and called aloes in different parts of the world.

Place. Aloe groweth very plenteouſly in India, and from thence cometh the beſt juice; it groweth alſo in many places of Aſia and Arabia, near the ſea-ſide, but the juice thereof is not ſo good as that of India.

Government and Virtues. It is a martial plant, hot in the ſecond degree, and dry in the third, of a very bitter taſte; the juice, being refined and clarified from its droſs, is of a clear and blackiſh clean brown colour, it openeth the belly, and purgeth cold phlegmatic and choleric humours, which overburthen and hurt the ſtomach; it is the baſis in almoſt all pills; it comforteth, cleanſeth, and dryeth up ſuperfluous humours. It may be taken with cinnamon, ginger, mace, galingal, or anniſeſeed, to aſſuage and drive away pains of the ſtomach, and to comfort and warm the ſtomach, and expel phlegm; the ſame is alſo good againſt the jaundice and ſpitting of blood. Aloe made into powder, and ſtrewed upon new bloody wounds, ſtoppeth the blood and healeth the wound; likewiſe, being applied upon old ulcers, it cloſeth them up, and is a ſovereign medicine for ulcers about the ſecret parts and fundament. The ſame, boiled with wine and honey, healeth rifts and outgrowings of the fundament, and ſtoppeth the flux of the hemorrhoids, and, being applied with honey, it taketh away black ſpots, that come by ſtripes or bruiſes; it is alſo good againſt inflammations, hurts and ſcabs of the eyes, and againſt running and dimneſs of the ſame. Aloes mixed with oil of roſes and vinegar, and laid to the forehead and temples, aſſuageth the head-ach; the head being often rubbed with aloes mixed with wine, keepeth the hair from falling off. The ſame applied with wine cureth ſores of the mouth and gums, the throat, and kernels under the tongue; and outwardly applied it is a good conſolidative medicine; ſtoppeth bleeding, and doth modify and cleanſe all corruption.

## BAWM.

THIS herb is ſo well known to be an inhabitant in almoſt every garden, that I ſhall not need to write any deſcription thereof, although the virtues of it, which are many, may not be omitted.

Government and Virtues. It is an herb under Jupiter, and under Cancer, and ſtrengthens nature much in all its actions*. Let a ſyrup, made with the juice of it and ſugar, (as you ſhall be taught at the latter end of the book,) be kept in every gentlewoman's houſe, to relieve the weak ſtomachs and ſick bodies of their poor neighbours; as alſo the herb kept dry in the houſe, that ſo, with other convenient ſimples, you may make it into an electuary with honey, according as the diſeaſe is, and as the ſtate of the patient may from time to time happen to be. The Arabian phyſicians have highly extolled the virtues hereof, although the Greeks thought it not worth mentioning. Serapio ſaith, it cauſeth the mind and heart to become merry, and reviveth the heart fainting into ſwoonings, eſpecially of ſuch as are overtaken in their ſleeps, and driveth away all troubleſome cares and thoughts out of the mind ariſing from melancholy, or black choler; which Avicen alſo confirmeth. It is very good to help digeſtion, and open obſtructions of the brain; and hath ſuch a purging quality, ſaith Avicen, as to expel thoſe melancholy vapours from the ſpirits and blood which are in the heart and arteries, although it cannot do ſo in other parts of the body. Dioſcorides ſaith, that the leaves ſteeped in wine, and the wine drunk, and the leaves externally applied, is a remedy againſt the ſting of ſcorpions, and the bitings of mad dogs; and commendeth the decoction thereof for women to bathe or ſit in, to procure their courſes; it is good to waſh aching teeth therewith, and profitable for thoſe that have the bloody flux. The leaves alſo with a little nitre taken in drink, are good againſt a ſurfeit of muſhrooms, helps the griping pains of the belly, and, being made into an electuary, it is good for them that cannot fetch their breath with eaſe; uſed with ſalt, it takes away wens, kernels, or hard ſwellings, in the fleſh or throat: it cleanſeth foul ſores, and eaſeth pains of the gout It is alſo good for the liver and ſpleen. A tanſy or caudle made with eggs, and the juice thereof while it is young, putting to it ſome ſugar and roſe-water, is good for women in child-bed, when the after-birth is not thoroughly voided, and for their faintings upon, or after, their ſore travail. The herb bruiſed and boiled in a little wine and oil, laid warm on a boil, will ripen and break it.

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* Pliny, when writing on bawm, informeth us, that, if it be tied to a ſword which gave the wound, it inſtantly ſtoppeth the blood.

## BARBERRY.

THE ſhrub is ſo well known to every boy and girl that hath but attained to the age of ſeven years, that it needs no deſcription.

Government and Virtues. Mars own the ſhrub, and preſents it to the uſe of my countrymen to purge their bodies of choler. The inner rind of the barberry-tree boiled in white wine, and a quarter of a pint drunk each morning, is an excellent remedy to cleanſe the body of choleric humours, and free it from ſuch diſeaſes as choler cauſeth, ſuch as ſcabs, itch, tetters, ringworms, yellow jaundice, boils, &c. It is excellent for hot agues, burnings, ſcaldings, heat of blood, heat of the liver, and bloody flux; the berries are as good as the bark, and more pleaſing; they get a man a good ſtomach to his victuals, by ſtrengthening the attractive faculty, which is under Mars. The hair waſhed with the lye made of the aſhes of the tree, and water, will make it turn yellow, viz. Mars' own colour. The fruit and rind of this ſhrub, the flowers of broom and of heath, or furze, cleanſe the body of choler by ſympathy, as the flowers, leaves, and bark, of the peach-tree do by antipathy; becauſe theſe are under Mars, that under Venus.

## BARLEY.

THE continual uſefulneſs hereof hath made all in general ſo acquainted with it, that it is altogether needleſs to deſcribe its ſeveral kinds hereof plentifully growing, being yearly ſown in this land; the virtues whereof take as followeth:

Government and Virtues. It is a notable plant of Saturn; if you view diligently its effects by ſympathy and antipathy, you may eaſily perceive a reaſon of them, as alſo why barley-bread is ſo unwholeſome for melancholy people. Barley, in all the parts and compoſitions thereof, except malt, is more cooling than wheat, and a little cleanſing; and all the preparations thereof, as barley-water, and other things made thereof, do give great nouriſhment to perſons troubled with fevers, agues, and heats in the ſtomach. A poultice made of barley meal or flour, boiled in vinegar and honey, and a few dry figs put into them, diſſolveth all hard impoſthumes, and aſſuageth inflammations, being thereto applied; and, being boiled with melilot and camomile flowers, and ſome linſeed, fenugreek, and rue in powder, and applied warm, it eaſeth pains in the ſide and ſtomach, and windineſs of the ſpleen. The meal of barley and fleawort boiled in water, and made into a poultice with honey and oil of lilies, applied warm, cureth ſwellings under the ears, throat, neck, and ſuch-like; and a plaiſter made thereof with tar, wax, and oil, helpeth the king's evil in the throat: boiled with ſharp vinegar into a poultice, and laid on hot, helpeth the leproſy: being boiled in red wine, with pomegranate-rinds and myrtles, it ſtayeth the laſk or other flux of the belly: boiled with vinegar and a quince, it eaſeth the pains of the gout. Barley-flour, white ſalt, honey, and vinegar, mingled together, take away the itch ſpeedily and certainly: the water diſtilled from the green barley in the end of May is very good for thoſe that have defluxions of humour fallen into the eyes, and eaſeth the pains, being dropped into them: or white bread ſteeped therein, and bound on to the eyes, doth the ſame.

## GARDEN OR SWEET BASIL.

Description. THE greater ordinary baſil riſeth up uſually with one upright ſtalk, diverſely branching forth on all ſides, with two leaves at every joint, which are ſomewhat broad and round, yet pointed, of a pale-green colour, but freſh, a little ſnipt about the edges, and of a ſtrong heady ſcent. The flowers are ſmall and white, ſtanding at the tops of the branches, with two ſmall leaves at the joints, in ſome places green, in others brown, after which come black ſeed. The root periſheth at the approach of winter, and therefore muſt be new ſown every year.

Place. It groweth in gardens only.

Time. It muſt be ſowed late, and flowers in the heat of ſummer, being a very tender plant.

Government and Virtues. With reſpect to the qualities of this herb, moſt authors differ; Galen and Dioſcorides hold it not fitting to be taken inwardly, as does alſo Cryſippus; but Pliny and the Arabian phyſicians defend it. For my own part, I preſently found that ſpeech true, *Non noſtrum inter nos tantas componere lites*; and away to Dr. Reaſon went I, who told me it was an herb of Mars, and under the Scorpion, and perhaps therefore called baſilicon, and then no marvel if it carries a kind of virulent quality with it. Being applied to the place bitten by a venomous beaſt, or ſtung by a waſp or hornet, it ſpeedily draws the poiſon to it. Every like draws its like. Mizaldus affirms, that, if it be laid to rot in horſe-dung, it will breed venomous beaſts: and Hollerius, a French phyſician, affirms upon his own knowledge, that an acquaintance of his, by common ſmelling to it, had a ſcorpion bred in his brain. Something is the matter, this herb and rue will not grow together, no, nor near each other: and we know that rue is as great an enemy to poiſon as any that grows. To conclude, it expelleth both birth and after-birth, and, as it helps the deficiency of Venus in one kind, ſo it ſpoils all her actions in another.

## BAY-TREE.

THIS is ſo well known, that it needs no deſcription; I ſhall therefore only write the virtues thereof, which are many.

Government and Virtues. I ſhall but only add a word or two to what my friend hath written, viz. That it is a tree of the Sun, and under the celeſtial ſign Leo, and reſiſteth witchcraft very potently, as alſo all the evils old Saturn can do to the body of man, and they are not a few; for it is the ſpeech of one, and I am miſtaken if it were not Mizaldus, that neither witch nor devil, thunder nor lightning, will hurt a man in the place where a bay-tree is. Galen ſaith, that the leaves or bark do dry and heal very much, and the berries more than the leaves. The bark of the root is leſs ſharp and hot, but more bitter, and hath ſome aſtriction withal, whereby it is effectual to break the ſtone, and good to open obſtructions of the liver, ſpleen, and other inward parts, which bring the dropſy, jaundice, &c. The berries are very effectual againſt the poiſon of venomous creatures, and the ſtings of waſps and bees, as alſo againſt the peſtilence, or other infectious diſeaſes, and therefore is put into ſundry treacles for that purpoſe: they likewiſe procure women's courſes; and ſeven of them, given to a woman in ſore travail of child-birth, do cauſe a ſpeedy delivery, and expel the after-birth, and therefore muſt not be taken by ſuch as have gone out their time, leſt they procure abortion, or cauſe labour too ſoon: they wonderfully help all cold and rheumatic diſtillations from the brain to the eyes, lungs, or other parts; and, being made into an electuary with honey, do help the conſumption, old-coughs, ſhortneſs of breath, and thin rheums; as alſo the megrim: they mightily expel wind, and provoke urine: help the mother, and kill worms: the leaves alſo work the like effects. A bath of the decoction of the leaves and berries, is ſingularly good for women to ſit in, that are troubled with the mother, or the diſeaſes thereof, or the ſtoppings of their courſes, or for the diſeaſes of the bladder, pains in the bowels by wind, and ſtopping of urine. A decoction likewiſe of equal parts of bay-berries, cummin-ſeed, hyſſop, origanum, and euphorbium, with ſome honey, and the head bathed therewith, doth wonderfully help diſtillations and rheums, and ſettleth the palate of the mouth into its place. The oil made of the berries is very comfortable in all cold griefs of the joints, nerves, arteries, ſtomach, belly, or womb; and helpeth palſies, convulſions, cramps, achs, trembling, and numbneſs in every part; alſo wearineſs, and pains that come by ſore travellings: all griefs and pains likewiſe proceeding from wind, either in the head, ſtomach, back, belly, or womb, by anointing the parts affected therewith; and pains in the ears are alſo cured by dropping in ſome of the oil, or by receiving into the ears the warm fume of the decoction of the berries through a funnel. The oil takes away marks of the ſkin and fleſh by bruiſes, falls, &c. and diſſolveth the congealed blood in them: it helpeth alſo the itch, ſcabs, and wheals, in the ſkin.

## BEANS.

BOTH the garden and field beans are ſo well known, that it ſaveth me labour of writing any deſcription of them.

Government and Virtues. They are plants of Venus: and the diſtilled water of the flowers of garden-beans is good to cleanſe the face and ſkin from ſpots and wrinkles; and the meal or flower of them, or the ſmall bean, doth the ſame. The water diſtilled from the green huſks is held to be very effectual againſt the ſtone, and to provoke urine. Bean-flour is uſed in poultices, to aſſuage inflammations riſing upon wounds, and the ſwelling of women's breaſts cauſed by the curdling of their milk, and repreſſeth their milk. The flour of beans and fenugreek mixed with honey, and applied to felons, boils, bruiſes, or blue marks by blows, or the impoſthumes in the kernels of the ears, helpeth them all: and with roſe leaves, frankincenſe, and the white of an egg, being applied to the eyes, helpeth them that are ſwoln, or do water, or have received any blow upon them, if uſed with wine. If a bean be parted in two, the ſkin being taken away, and laid on the place where a leech hath been ſet that bleedeth too much, it ſtayeth the bleeding. Bean-flour boiled to a poultice with wine and vinegar, and ſome oil put thereto, eaſeth both pain and ſwelling of the ſcrotum: the huſks boiled in water to a conſumption of a third part thereof, ſtayeth a laſk; and the aſhes of the huſks, made up with old hog's greaſe, helpeth the old pains, contuſions, and wounds, of the ſinews, the ſciatica, and gout. The field-beans have all the aforementioned virtues as the garden-beans. Beans eaten are extreme windy meat; but if, after the Dutch faſhion, when they are half boiled, you huſk them and ſtew them, they are wholeſomer food.

## FRENCH-BEANS.

Description. THE French or kidney bean ariſeth up at firſt but with one ſtalk, which afterward divideth itſelf into many arms or branches, but all ſo weak, that, if they be not ſuſtained with ſticks or poles, they will lie fruitleſs upon the ground; at ſeveral places of theſe branches grow forth long foot-ſtalks, with every one of them three broad, round, and pointed, green leaves at the end of them, towards the top whereof come forth divers flowers made like unto peaſe bloſſoms, of the ſame colour for the moſt part that the fruit will be of, that is to ſay, white, yellow, red, blackiſh, or of a deep purple, but white is the moſt uſual; after which come long and ſlender flat kids, ſome crooked, ſome ſtrait, with a ſtring as it were running down the back thereof, wherein are contained flattiſh round fruit, made to the faſhion of a kidney; the root is long, ſpreading with many ſtrings annexed to it, and periſheth every year.

There is alſo another ſort of French-bean commonly growing with us in this land, which is called the ſcarlet-flowered bean. This ariſeth up with ſundry branches as the other, but runs up higher to the length of hop-poles, about which they grow twining, but turning contrary to the ſun; they have foot-ſtalks with three leaves on each, as on the other: the flowers alſo in faſhion are like the other, but many more ſet together, and of a moſt orient ſcarlet colour. The beans are larger than the ordinary kind, of a deep purple colour, turning black when it is ripe and dry: the root of this alſo periſheth in winter.

Government and Virtues. Theſe alſo belong to Venus; and, being dried and beaten to powder, are great ſtrengtheners of the kidneys: neither is there a better remedy than it, if taken a drachm at a time in white wine, to prevent the ſtone, or to cleanſe the kidneys of gravel or ſtoppage. The ordinary French-beans are of an eaſy digeſtion; they move the belly, provoke urine, enlarge the breaſt that is ſtraightened with ſhortneſs of breath, engender ſperm, and incite to venery. And the ſcarlet-coloured beans, on account of the beauty of their colour, being ſet near a quickſet-hedge, will greatly adorn the ſame by climbing up thereon, ſo that they may be diſcerned a great way, not without admiration of the beholder at a diſtance. But they will go near to kill the quickſets by clothing them in ſcarlet.

## LADY's BED-STRAW.

BESIDES the common name above written, it is called cheeſe-rennet, becauſe it performs the ſame office; as alſo gallion, pertimugger, and maid's hair, and by ſome wild-roſemary.

Decription. This riſeth up with divers ſmall, brown, and ſquare, upright, ſtalks, a yard high, or more, ſometimes branched forth into divers parts, full of joints, and with divers very fine ſmall leaves at every one of them, little or nothing rough at all: at the tops of the branches grow many long tufts or branches of yellow flowers, very thick ſet together, from the ſeveral joints, which conſiſt of four leaves each, which ſmell ſomewhat ſtrong, but not unpleaſant: the ſeed is ſmall and black, like poppy-ſeed, two for the moſt part joined together; the root is reddiſh, with many ſmall threads faſtened unto it, which take ſtrong hold of the ground, and creepeth a little; and the branches, leaning a little down to the ground, take root at the joints thereof, whereby it is eaſily encreaſed.

There is alſo another ſort of lady's bed-ſtraw, growing frequently in England, which beareth white flowers as the other doth yellow; but the branches of this are ſo weak, that, unleſs it be ſuſtained by the hedges, or other things near which it groweth, it will lie down on the ground; the leaves are a little bigger than the former, and the flowers are not ſo plentiful as thoſe; and the root hereof is alſo thready and abiding.

Place. They grow in meadows and paſtures, both wet and dry, and by the ſides of hedges.

Time. They flower in May for the moſt part, and the ſeed is ripe in July and Auguſt.

Government and Virtues. They are both herbs of Venus, and therefore ſtrengthen the parts, both internal and external, which ſhe rules. The decoction of the former of theſe, being drunk, is good to fret and break the ſtone, provoke urine, ſtay inward bleedings, and to heal inward wounds: the herb or flower bruiſed, and put up into the noſtrils, ſtayeth their bleeding likewiſe: the flowers and the herb being made into an oil by being ſet in the ſun, and changed after it hath ſtood ten or twelve days; or into an ointment, being boiled in axungia or ſallad-oil, with ſome wax melted therein after it is ſtrained; either the oil made thereof, or the ointment, do help burnings with fire or ſcalding with water: the ſame alſo, or the decoction of the herb and flower, is good to bathe the feet of travellers who by much walking have contracted a wearineſs and ſtiffneſs in their ſinews and joints: if the decoction be uſed warm, and the joints afterwards anointed with the ointment, it helpeth the dry ſcab, and the itch in children: and the herb with the white flowers is alſo very good for the ſinews, arteries, and joints, to comfort and ſtrengthen them after travail, cold, and pains.

## BEETS.

Description. OF beets there are two ſorts which are beſt known generally, and whereof I ſhall principally treat at this time, viz. the white and red beets; and their virtues.

The common white beet hath many great leaves next the ground, ſomewhat large, and of a whitiſh-green colour; the ſtalk is great, ſtrong, and ribbed, bearing great ſtore of leaves almoſt to the very top of it: the flowers grow in very long tufts, ſmall at the ends, and turning down their heads, which are ſmall, pale, greeniſh-yellow, burs, giving cornered prickly ſeed. The root is great, long, and hard, and, when it hath given ſeed, is of no uſe at all.

The common red beet differeth not from the white, but only it is leſs, and the leaves and the roots are ſomewhat red: the leaves are differently red, in ſome only with red ſtrakes or veins, ſome of a freſh red, and others of a dark red. The root hereof is red, ſpungy, and not uſed to be eaten.

Government and Virtues. The government of theſe two ſorts of beets are far different; the red beet being under Saturn, and the white under Jupiter; therefore take the virtues of them apart, each by itſelf. The white beet doth much looſen the belly, and is of a cleanſing digeſting quality, and provoketh urine: the juice of it open obſtructions both of the liver and ſpleen, and is good for the head-ach, and ſwimmings therein, and turnings of the brain; and is effectual alſo againſt all venomous creatures; and, applied to the temples, ſtayeth inflammations in the eyes; it helpeth burnings being uſed without oil, and, with a little allum put to it, is good for St. Anthony's fire. White beet is hot and dry, and looſens the belly by reaſon of its nitroſity. It is an errhine, eſpecially the root; for the juice of it, received into the noſtrils, occaſions ſneezing; the young plants, with their roots, gently boiled and eaten with vinegar, procure an appetite, extinguiſh thirſt, and ſuppreſs choler in the ſtomach. Beet among the antients was much noticed for its inſipid taſte. Martial reproaches it in the following diſtich:

Ut ſapiant fatuæ fabrorum prandia betæ,
O quam ſæpe petet vina piperque coquus?

The juice of this herb drawn up into the noſtrils powerfully evacuates phlegmatic humours from the brain, and cures inveterate head-achs. This is counted a great ſecret by ſome. It is alſo good for all wheals, puſhes, bliſters, and blains, in the ſkin; the herb boiled, and laid upon chilblains or kibes, helpeth them: the decoction thereof, in water and ſome vinegar, healeth the itch, if bathed therewith, and cleanſeth the head of dandriff, ſcurf, and dry ſcabs, and doth much good for fretting and running ſores, ulcers, and cankers, in the head, legs, or other parts; and is much commended againſt baldneſs and ſhedding of hair.

The red beet is good to ſtay the bloody-flux, women's courſes, and the whites, and to help the yellow-jaundice. The juice of the root, put into the noſtrils, purgeth the head, helpeth the noiſe in the ears, and the tooth-ach; the juice ſnuffed up the noſe helps a ſtinking breath, if the cauſe lies in the noſe, as many times it doth, if any bruiſe have been there; as alſo want of ſmell coming that way.

## WATER-BETONY.

CALLED alſo broomwort, and in Yorkſhire biſhop's leaves.

Description. The water-betony riſeth up with ſquare, hard, greeniſh, ſtalks, ſometimes brown, ſet with broad dark-green leaves, dented about the edges with notches, ſomewhat reſembling the leaves of the wood-betony, but much larger, two for the moſt part ſet at a joint; the flowers are many, ſet at the tops of the ſtalks and branches, being round-bellied, open at the brims, and divided into two parts, the uppermoſt being like a hood, and the loweſt like a lip hanging down, of a dark-red colour, which, paſſing away, there come in their places ſmall round heads with ſmall points in the ends, wherein lie ſmall and browniſh ſeeds: the root is a thick buſh of ſtrings and threads growing from the head.

Place. It groweth by ditch-ſides, brooks, and other water-courſes, generally through this land, and is ſeldom found far from the water-ſides.

Time. It flowereth about July, and the ſeed is ripe in Auguſt.

Government and Virtues. Water-betony is an herb of Jupiter in Cancer, and is appropriated more to wounds and hurts in the breaſt than wood-betony, which follows. It is an excellent remedy for ſick hogs. It is of a cleanſing quality; the leaves, bruiſed and applied, are effectual for all cold and filthy ulcers; and eſpecially if the juice of the leaves be boiled with a little honey, and then dipped therein, and the ſores dreſſed therewith: as alſo for bruiſes or hurts, whether inward or outward. The diſtilled water of the leaves is uſed for the ſame purpoſes; as alſo to bathe the face or hands ſpotted or blemiſhed, or diſcoloured by ſun-burning. Pliny ſaith, that ſerpents, if they are incloſed or ſurrounded with this herb, will immediately begin fighting, and kill each other preſently.

I confeſs I do not much fancy diſtilled waters, I mean ſuch waters as are diſtilled cold; ſome virtue of the herb they may happen to have, it were a ſtrange thing elſe; but this I am confident of, that, being diſtilled in a pewter ſtill, as the vulgar faſhion is, both the chemical oil and ſalt are left behind, unleſs you burn them, and then all is ſpoiled, even the water, which was good for as little as can be, by ſuch diſtillation.

## WOOD BETONY.

Description. THE common or wood betony hath many leaves riſing from the root, which are ſomewhat broad and round at the ends, roundly dented about the edges, ſtanding upon long footſtalks, from among which riſe up ſmall, ſquare, ſlender, but yet upright, hairy ſtalks, with ſome leaves thereon, two apiece at the joints, ſmaller than the lower, whereon are ſet ſeveral ſpiked heads of flowers like lavender, but thicker and ſhorter for the moſt part, and of a reddiſh or purple colour, ſpotted with white ſpots both in the upper and lower part: the ſeeds, being contained within the huſks that hold the flowers, are blackiſh, ſomewhat long, and uneven. The roots are many white thready ſtrings; the ſtalk periſheth, but the root, with ſome leaves thereon, abides all the winter. The whole plant is ſomewhat ſmall.

Place. It groweth frequently in woods, and delighteth in ſhady places.

Time. It flowereth in July, after which the ſeed is quickly ripe; yet is in its prime in May.

Government and Virtues. This herb is appropriated to the planet Jupiter, and under the ſign Aries. Antonius Muſa, phyſician to the emperor Auguſtus Cæſar, wrote a peculiar book on the virtues of this herb; and, amongſt other virtues, ſaith of it, that it preſerves the lives and bodies of men from the danger of epidemical diſeaſes, and from witchcrafts alſo. It is found by daily experience to be good for many diſeaſes: it helpeth thoſe that lothe or cannot digeſt their meat; thoſe that have weak ſtomachs, or ſour belchings, or a continual riſing in their ſtomach, uſing it familiarly either green or dry. Either the herb or root, or the flowers, drunk in broth, or meat, or made into conſerve, ſyrup, water, electuary, or powder, as every one may beſt frame themſelves unto, or as the time or ſeaſon requireth: taken any of the aforeſaid ways, it helpeth the jaundice, falling ſickneſs, the palſy, convulſions, or ſhrinking of the ſinews; the gout, and thoſe that are inclined to dropſies; and thoſe that have continual pains in the head, although inclining to phrenzy. The powder mixed with pure honey is no leſs available for all ſorts of coughs or colds, wheeſing or ſhortneſs of breath, diſtillations of thin rheum upon the lungs, which cauſeth conſumptions. The decoction made with mead and a little pennyroyal, is good for thoſe that are troubled with putrid agues, whether quotidian, tertian, or quartan; and to draw down and evacuate the blood and humours which by falling into the eyes do hinder the ſight. The decoction thereof made in wine, and taken, killeth the worms in the belly, openeth obſtructions both of the liver and ſpleen, cureth ſtitches and pains in the back or ſide, the torments and griping pains of the bowels, and the wind-cholic; and, mixed with honey, purgeth the belly, helpeth to bring down women's courſes, and is of ſpecial uſe for thoſe that are troubled with the falling down of the womb and pains thereof, and cauſeth an eaſy and ſpeedy delivery of women in child-birth. It helpeth alſo to break and expel the ſtone, either in the bladder or kidneys. The decoction with wine, gargled in the mouth, eaſeth the tooth-ache; it is commended againſt the ſtinging of venomous ſerpents or biting of mad dogs, being uſed inwardly and applied outwardly to the place. One drachm of the powder of betony, taken with a little honey in ſome vinegar, doth wonderfully refreſh thoſe that are over-wearied by travel; it ſtayeth bleeding at the mouth or noſe, and helpeth thoſe that piſs or ſpit blood, and thoſe that are burſten or have a rupture; and is good for ſuch as are bruiſed by any fall or otherwiſe. The green herb bruiſed, or the juice applied to any inward hurt, or outward green wound in the head or body, will quickly heal and cloſe it up, as alſo any veins or ſinews that are cut; and will draw forth any broken bone or ſplinter, thorn, or other thing, gotten into the fleſh. It is no leſs profitable for old ſores or filthy ulcers, even although fiſtulous and hollow; but ſome do adviſe to add a little ſalt for this purpoſe. Being applied with a little hog's lard, it helpeth a plague-ſore, and other boils and puſhes. The fumes of the decoction while it is warm, received by funnel into the ears, eaſeth the pains of them, deſtroyeth the worms, and cureth the running ſores in them: and the juice dropped into them doth the ſame. The root of betony is diſpleaſing both to the taſte and ſtomach; whereas the leaves and flowers, by their ſweet and ſpicy taſte, are comfortable both in meat and medicine.

Theſe are ſome of the many virtues Antonius Muſa appropriates to betony. It is a very precious herb, without doubt, and very proper to be kept in every houſe, prepared in ſyrup, conſerve, oil, ointment, and plaſter. The flowers are uſually conſerved.

## BEECH-TREE.

IN treating of this tree, you muſt underſtand that I mean the great maſt-beech, which is to be diſtinguiſhed from that ſmall rough one called in Suſſex the ſmall beech, but in Eſſex hornbean. I ſuppoſe it needleſs to deſcribe it, being already ſo well known to my countrymen.

**Place.** It groweth in woods, amongſt oaks and other trees; and in parks, foreſts, and chaſes, to feed deer, and in other places to fatten ſwine.

**Time.** It bloometh in the end of April or beginning of May for the moſt part, and the fruit is ripe in September.

**Government and Virtues.** It is a plant of Saturn, and therefore performs his qualities and properties in its operations. The leaves of the beech-tree are cooling and binding, and therefore good to be applied to hot ſwellings to diſcuſs them. The nuts do much nouriſh ſuch beaſts as feed thereon. The water, found in the hollow places of decaying beeches, cures both man and beaſt of any ſcurf, ſcab, or running tetters, if they be waſhed therewith. You may boil the leaves into a poultice, or make an ointment of them, when the time of year ſerves.

## BILBERRIES.

THIS herb is alſo called by ſome, whorts, and whortle-berries.

**Description.** Of theſe I ſhall only ſpeak of two ſorts, which are commonly known in England, viz. the black and red bilberries. And firſt of the black.

This ſmall buſh creepeth along upon the ground, ſcarcely riſing half a yard high, with divers ſmall dark-green leaves ſet on the green branches, not always one againſt another, and a little dented about the edges; at the foot of the leaves come forth ſmall, hollow, pale, bluſh-coloured, flowers, the brims ending in five points, with a reddiſh thread in the middle, which paſs into ſmall round berries, of the ſize and colour of juniper-berries, but of a ſweetiſh ſharp taſte: the juice of them giveth a purpliſh colour to the hands and lips. The root groweth aſlope under-ground, and ſhoots up in ſundry places. It loſeth its leaves in winter.

The red bilberry, or whortle-buſh, riſeth up like the former, having ſundry harder leaves, which are like the leaves of the box-tree, green and round-pointed, ſtanding on the ſeveral branches thereof; at the tops whereof only (and not from the ſides, as in the former) come forth divers round flowers of a pale-red colour; after which ſucceed round, reddiſh, ſappy, berries, which when ripe are of a ſharp taſte. The root runneth in the ground, as in the former; but the leaves of this abide all the winter.

**Place.** The firſt groweth in foreſts, on heaths, and ſuch-like barren places; the red groweth in the northern parts of this land, as Lancaſhire, Yorkſhire, &c. &c.

**Time.** They flower in March and April; and the fruit of the black is ripe in June and July.

Government and Virtues. They are under the dominion of Jupiter. It is a pity they are uſed no more in phyſic than they are. The black bilberries are good in hot agues, and to cool the heat of the liver and ſtomach; they do ſomewhat bind the belly, and ſtay vomiting and loathings; the juice of the berries made into a ſyrup, or the pulp made into a conſerve with ſugar, is good for the purpoſes aforeſaid; as alſo for an old cough, or an ulcer in the lungs, or other diſeaſes therein. The red whorts are more binding, and ſtop women's courſes, ſpitting of blood, or any other flux of blood or humours, being uſed as well outwardly as inwardly.

## BYFOIL, or TWAYBLADE.

Description. THIS ſmall herb from a root ſomewhat ſweet, ſhooting downwards many long ſtrings, riſeth up a round green ſtalk, bare or naked next the ground for an inch, two, or three, to the middle thereof, as it is in the age or growth; as alſo from the middle upwards to the flowers, having only two broad plaintain-like leaves, but whiter, ſet at the middle of the ſtalk, one againſt another, and compaſſeth it round at the bottom of them.

Place. It is an uſual inhabitant in woods, coppices, and in many other places, in this land.

There is another ſort grows in wet grounds and marſhes, which is ſomewhat different from the former: it is a ſmaller plant, and greener, having ſometimes three leaves; the ſpike of flowers is leſs than the former, and the roots of this do run or creep in the ground.

They are much and often uſed by many to good purpoſes, for wounds both green and old, and to conſolidate or knit ruptures, being a plant of Saturn.

## BIRCH-TREE.

Description. THIS groweth a goodly tall ſtraight tree, fraught with many boughs and branches bending downward, the old ones being covered with a diſcoloured chapped bark, and the younger being much browner; the leaves at firſt breaking out are crumpled, and afterwards like the beech-leaves, but ſmaller and greener, and dented about the edges; it beareth ſmall ſhort catkins, ſomewhat like thoſe of the hazel-nut tree, which abideth on the branches a long time, until, grown ripe, they fall on the ground, and their ſeed with them.

Place. It uſually grows in woods.

Government and Virtue. It is a tree of Venus; the juice of the leaves while young, or the diſtilled water of them, or the water that comes out of the tree, being

ing bored with an augur, and diſtilled afterwards; any of theſe, being drunk for ſome time together, is available to break the ſtone in the kidneys or bladder, and is good alſo to waſh ſore mouths. The leaves of the birch-tree are hot and dry, cleanſing, reſolving, opening, and bitter; for which reaſon they are of no ſmall uſe in a dropſy, the itch, and the like. The bark is bituminous, and is therefore mixed with perfumes that are to correct the air. The fungus of it has an aſtringent quality, upon which account it ſtops blood miraculouſly. This tree, in the beginning of ſpring, before the leaves come forth, being pierced, yields plentifully a ſweet and potulent juice, which ſhepherds, when they are thirſty, often drink in the woods. Tragus, Helmont, Charleton, and others, commend the virtues and efficacy of this liquor, and not undeſervedly, for the ſtone in the kidneys and bladder, for bloody urine, and the ſtranguary. This tree begins to yield its juice about the middle of Februry, and ſometimes not till the beginning of March. Tragus alſo commends it for the jaundice. Some waſh their faces with it, to take off ſpots and beautify the ſkin. Dr. Needham cured ſcorbutic conſumptions with it: he uſed to mix with it good wine and honey. Rennet, infuſed in the juice, preſerves cheeſe from worms. The juice of birch cures warts and pimples in the face, if it be waſhed with it in the day-time, morning, and evening, and permitted to dry on.

## BIRD's FOOT.

THIS ſmall herb groweth not above a ſpan high, with many branches ſpread upon the ground, ſet with many wings of ſmall leaves; the flowers grow upon the branches, many ſmall ones of a pale-yellow colour being ſet at a head together, which afterwards turn into ſmall jointed cods, well reſembling the claws of ſmall birds, whence it took its name.

There is another ſort of bird's foot in all things like the former, but a little larger, the flowers of a pale whitiſh red colour, and the cods diſtinct by joints like the other, but a little more crooked, and the roots do carry many ſmall white knots or kernels amongſt the ſtrings.

Place. Theſe grow on heaths, and in many open uncultivated places in this land.

Time. They flower and ſeed in the end of ſummer.

Government and Virtues. They belong to Saturn, and are of a drying binding quality, and thereby very good to be uſed in wound-drinks, as alſo to apply outwardly for the ſame purpoſe. But the latter bird's foot is found by experience to break the ſtones in the back or kidneys, and drive them forth, if the decoction thereof be taken; it alſo wonderfully helpeth the rupture, being taken inwardly, and outwardly applied to the place.

All ſalts have beſt operation upon the ſtone, as ointments and plaſters have upon wounds; and therefore you may make a ſalt of this for the ſtone: the way to prepare it will be given in plainer terms in the Diſpenſatory at the latter end of this book.

## BISHOP's WEED.

BESIDES the common name biſhop's weed, it is uſually known by the Greek name, ammi, and amios; ſome call it Æthiopian cummin-ſeed, and others cummin-royal; as alſo herb William, and bulwort.

Description. Common biſhop's weed riſeth up with a round ſtalk, ſometimes as high as a man, but uſually three or four feet high, beſet with divers ſmall, long, and ſomewhat broad, leaves, cut in ſome places and dented about the edges, growing one againſt another, of a dark-green colour, having ſundry branches on them, and at the top ſmall umbels of white flowers, which turn into ſmall, round, brown, ſeed, little bigger than parſley-ſeed, of a quick hot ſcent and taſte. The root is white and ſtringy, periſhing yearly after it hath ſeeded, and uſually riſeth again of its own ſowing.

Place. It groweth wild in many places in England and Wales, as between Greenhythe and Graveſend.

Government and Virtues. It is hot and dry in the third degree, of a bitter taſte, and ſomewhat ſharp withal; it provokes luſt, (I ſuppoſe Venus owns it;) it digeſteth humours, provoketh urine and women's courſes, expelleth wind, and, being taken in wine, eaſeth pains and gripings in the bowels, and is good againſt the bitings of ſerpents; it is uſed to good effect in thoſe medicines which are given to hinder the poiſonous operation of cantharides upon the paſſage of the urine: being mixed with honey, and applied to black or blue marks coming of blows or bruiſes, it takes them away: and, being drunk or outwardly applied, it abateth the high colour of the urine, and makes it pale; and the fumes thereof, taken with roſin or raiſins, cleanſe the mother.

## BISTORT.

IT is alſo called ſnakeweed, Engliſh ſerpentary, dragon-wort, oſtrich, and paſſions.

Description. This hath a thick, ſhort, knobbed, root, blackiſh without, and ſomewhat reddiſh within, a little crooked or turned together, of an harſh aſtringent taſte, with divers black threads hanging thereto, from whence ſpring up every year divers leaves, ſtanding upon long footſtalks, being ſomewhat broad and long like a dock-leaf, and a little pointed at the ends, but that is of a bluiſh-green colour on the upper ſide, and of an aſh-colour grey ſomewhat tinged with purple underneath, with divers veins therein; from among which riſe up divers ſmall and ſlender ſtalks, two feet high, and almoſt naked and without leaves, or with very few, and narrow, bearing a ſpiky buſh of pale fleſh-coloured flowers, which being paſt, there abideth ſmall ſeed, ſomewhat like ſorrel-ſeed, but larger.

There are other ſorts of biſtort growing in this land, but ſmaller in height, root, and ſtalks, and eſpecially in the leaves. The root is blackiſh without, and ſomewhat whitiſh within, of an auſtere binding taſte, as the former.

PLACE. They grow in ſhadowy moiſt woods, and at the foot of hills, but are chiefly nouriſhed up in gardens. The narrow-leaved biſtort groweth in the north; in Lancaſhire, Yorkſhire, and Cumberland.

TIME. They flower about the end of May, and the ſeed is ripe about the beginning of July.

GOVERNMENT AND VIRTUES. It belongs to Saturn, and is in operation cold and dry. Both the leaves and roots have a powerful faculty to reſiſt all poiſon: the root in powder taken in drink, expelleth the venom of the plague, the ſmall pox, meaſles, purples, or any other infectious diſeaſe, driving it out by ſweating; the decoction of the root, being drunk in wine, ſtayeth all manner of inward bleedings or ſpittings of blood, and any fluxes in the body of either man or woman, or vomiting. It is alſo very available againſt ruptures, or burſtings, or bruiſes, or falls, diſſolving the congealed blood, and eaſing the pains that happen thereupon; it alſo helpeth the jaundice. The water, diſtilled from both leaves and root, is a ſingular remedy to waſh any place bitten or ſtung by any venomous creatures: as alſo for any of the purpoſes before ſpoken of; and is very good to waſh any running ſores or ulcers. The decoction of the root in wine, being drunk, hindereth abortion or miſcarriage in child-bearing. The leaves alſo kill worms in children, and are great help for them that cannot keep their water; if the juice of plantain be added thereto, and outwardly applied, it much helpeth the gonorrhœa, or running of the reins. A drachm of the powder of the root taken in the water thereof, wherein ſome red-hot iron or ſteel hath been quenched, is alſo an admirable help thereto, ſo as the body be firſt prepared and purged from the offenſive humours. The leaves, ſeed, or roots, are all very good in decoctions, drinks, or lotions, for inward or outward wounds or other ſores: and the powder, ſtrewed upon any cut or wound in a vein, ſtayeth the immoderate bleeding thereof; the decoction of the roots in water, whereto ſome pomegranate peels and flowers are added, injected into the matrix, ſtayeth the acceſs of humours to the ulcers thereof, and bringeth it to its right place, being fallen down, and ſtayeth the immoderate flux of the courſes. The root hereof with pellitory of Spain and burnt allum of each a little quantity, beaten ſmall and made into a paſte with ſome honey, and a little piece thereof put into a hollow tooth, or held between the teeth if there be no hollowneſs in them, ſtayeth the defluxion of rheum upon them, which cauſeth pain, and helps to cleanſe the head, and void much offenſive water. The diſtilled water is very effectual to waſh ſores or cancers in the noſe, or any other part, if the powder of the root be applied thereunto afterwards. It is good alſo to faſten the gums, and to take away the heat and inflammations that happen in the jaws, almonds of the throat, or mouth, if the decoction of the leaves, roots, or ſeeds bruiſed, or the juice of them, be applied; but the roots are moſt effectual to the purpoſes aforeſaid.

## ONE-BLADE.

Description. THIS ſmall plant never beareth more than one leaf, but only when it riſeth up with its ſtalk, which thereon beareth another, but ſeldom more, which are of a bluiſh-green colour, broad at the bottom, and pointed with many ribs or veins like plantain; at the top of the ſtalk grow many ſmall flowers ſtar-faſhion, ſmelling ſomewhat ſweet; after which come ſmall reddiſh berries when they are ripe. The root is ſmall, of the ſize of a ruſh, lying and creeping under the upper cruſt of the earth, ſhooting forth in divers places.

Place. It grows in moiſt, ſhadowy, graſſy, places of woods in many parts of this realm.

Time. It flowereth about May, and the berries are ripe in June; the plant then quickly periſheth until the next year, when it ſpringeth from the ſame again.

Government and Virtues. It is an herb of the Sun, and therefore cordial. Half a drachm or a drachm at moſt of the root hereof in powder, taken in wine and vinegar, of each a like quantity, and the party preſently laid to ſweat, is held to be a ſovereign remedy for thoſe that are infected with the plague, and have a ſore upon them, by expelling the poiſon and defending the heart and ſpirits from danger; it is alſo accounted a ſingular good wound-herb, and therefore uſed with other herbs in making ſuch balms as are neceſſary for the curing of wounds either green or old, and eſpecially if the nerves or ſinews are hurt.

## BRAMBLE.

IT is alſo called black-berry buſh, and is ſo well known that it needs no deſcription; its virtues are as follow:

Government and Virtues. It is a plant of Venus in Aries. You have directions at the latter end of the book for the gathering of all herbs, plants, &c. The reaſon why Venus is ſo prickly is becauſe ſhe is in the houſe of Mars. The buds, leaves, and branches, while they are green, are of good uſe in the ulcers and putrid ſores of the mouth and throat, and for the quinſey; and likewiſe to heal other freſh wounds and ſores: but the flowers and fruit unripe are very binding; they are alſo profitable for the bloody flux and laſks, and a fit remedy for ſpitting of blood. Either the decoction or powder of the root, being taken, is good to break or drive forth gravel and the ſtone in the reins and kidneys. The leaves and brambles, as well green as dry, are excellent good lotions for ſores in the mouth or ſecret parts; the decoction of them and of the dried branches doth much bind the belly, and is good for too much flowing of women's courſes; the berries or the flowers are a powerful remedy againſt the poiſon of the moſt venemous ſerpents, as well drunk as outwardly applied, and help the ſores of the fundament, and the piles; the juice of the berries, mixed with juice of mulberries, doth bind more effectually, and help fretting and eating ſores and ulcers whereſoever. The diſtilled water of the branches, leaves, flowers, or fruit, is very pleaſant in taſte, and very effectual in fevers and hot diſtempers of the body, head, eyes, and other parts, and for all the purpoſes aforeſaid. The leaves boiled in lye, and the head waſhed therewith, heal the itch, and the running ſores thereof, and make the hair black. The powder of the leaves ſtrewed on cancers and running ulcers, doth wonderfully help to heal them. Some condenſate the juice of the leaves, and ſome the juice of the berries, to keep for their uſe all the year, for the purpoſes aforeſaid.

## BLIGHTS.

Description. OF theſe there are two ſorts commonly known, viz. white and red. The white hath leaves ſomewhat like unto beets, but ſmaller, rounder, and of a whitiſh-green colour, every one ſtanding upon a ſmall, long, foot-ſtalk; the ſtalk riſeth up two or three feet high, with ſuch-like leaves thereon; the flowers grow at the top in long round tufts or cluſters, wherein are contained ſmall and round ſeed: the root is very full of threads or ſtrings.

The red blight is in all things like the white, but that its leaves and tufted heads are exceeding red at the firſt, and afterwards turn more purple.

There are other kinds of blights which grow wild, differing from the two former ſorts but little, only the wild are ſmaller in every part.

Place. They grow in gardens, and wild in many places of this land.

Time. They ſeed in Auguſt and September.

Government and Virtues. They are all of them cooling, drying, and binding, ſerving to reſtrain the fluxes of blood in either man or woman, eſpecially the red: which alſo ſtayeth the overflowing of women's reds, as the white blight ſtayeth the whites, in women. It is an excellent ſecret, you cannot well fail in the uſe: they are all under the dominion of Venus.

There is another ſort of wild blight, ſomewhat like the other wild kinds, but have long ſpiked heads of greeniſh ſeed, ſeeming by the thick ſetting together to be all ſeed. This ſort the fiſhes are delighted with, and it is a good and uſeful bait.

## BORAGE AND BUGLOSS.

THESE are ſo well known to be inhabitants of every garden, that I hold it needleſs to deſcribe them.

To theſe I may add a third ſort, which is not ſo common, nor yet ſo well known, and therefore I ſhall give you its name and deſcription.

Name. It is called langue-de-beuf: but why they ſhould call one herb by the name of bugloſs, and another by the name of langue-de-beuf, is to me a queſtion, ſeeing one ſignifies ox-tongue in Greek, and the other ſignifies the ſame in French.

Description. The leaves thereof are ſmaller than thoſe of bugloſs, but much rougher, the ſtalk riſing up about a foot and a half high, and is moſt commonly of a red colour; the flowers ſtand in ſcaly rough heads, being compoſed of many ſmall yellow flowers, not much unlike to thoſe of the dandelion, and the ſeed flieth away in down as that doth; you may eaſily know the flowers by the taſte, for they are very bitter.

Place. It groweth wild in many places of the land, and may be plentifully found near London, as between Rotherhithe and Deptford, by the ditch ſides; its virtues are held to be the ſame with borage and bugloſs, only this is ſomething hotter.

Time. They flower in June and July, and the ſeed is ripe ſhortly after.

Government and Virtues. They are all three herbs of Jupiter, and under Leo, all great cordials and ſtrengtheners of nature. The leaves or roots are to very good purpoſe uſed in putrid and peſtilential fevers, to defend the heart, and help to reſiſt and expel the poiſon or the venom of other creatures: the ſeed is of like effect; and the ſeed and leaves are good to encreaſe milk in women's breaſts: the leaves, flowers, and ſeed, all or any of them, are good to expel penſiveneſs and melancholy: it helpeth to clarify the blood and to mitigate heat in fevers. The juice made into a ſyrup prevaileth much to all the purpoſes aforeſaid, and is put with other cooling, opening, cleanſing, herbs, to open obſtructions, and help the yellow jaundice, and, mixed with fumitory, to cool, cleanſe, and temper, the blood, whereby it helpeth the itch, ringworms, and tetters, or other ſpreading ſcabs or ſores. The flowers candied, or made into a conſerve, are helpful in the former caſes, but are chiefly uſed as a cordial, and are good for thoſe that are weak with long ſickneſs, and to comfort the heart and ſpirits of thoſe that are in a conſumption, or troubled with often ſwooning, or paſſions of the heart; the diſtilled water is no leſs effectual to all the purpoſes aforeſaid, and helpeth the redneſs and inflammations of the eyes, being waſhed therewith; the dried herb is never uſed, but the green; yet the aſhes thereof boiled in mead, or honey-water, are available againſt inflammations and ulcers in the mouth or throat, to waſh and gargle it therewith. The roots of bugloſs are effectual, being made into a licking electuary, for the cough, and to condenſate thin phlegm, and rheumatic diſtillations upon the lungs.

## BLUE-BOTTLE.

IT is called ſyanus, I ſuppoſe from the colour of it; hurt-ſickle, becauſe it turns the edge of the ſickles that reap the corn; blue-blow, corn-flower, and blue-bottle.

Description. I ſhall only deſcribe that which is moſt common, and in my opinion moſt uſeful: its leaves ſpread upon the ground, being of a whitiſh-green colour, ſomewhat cut on the edges like thoſe of corn-ſcabious, among which riſeth up a ſtalk divided into divers branches, beſet with long leaves of a greeniſh colour, either but very little indented or not at all; the flowers are of a blue colour, from whence it took its name, conſiſting of an innumerable company of ſmall flowers, ſet in a ſcaly head, not much unlike thoſe of knapweed; the ſeed is ſmooth, bright, and ſhining, wrapped up in a woolly mantle: the root periſheth every year.

Place. They grow in corn fields, amongſt all ſorts of corn, peaſe, and beans, but not in tares; if you pleaſe to take them up from thence, and tranſplant them in your garden, eſpecially towards the full of the Moon, they will grow more double than they are, and many times change their colour.

Place. They flower from the beginning of May to the end of harveſt.

Government and Virtues. As they are naturally cold, dry, and binding, ſo are they under the dominion of Saturn. The powder or dried leaves of the blue-bottle or corn-flower is given with good ſucceſs to thoſe that are bruiſed by a fall, or have broken a vein inwardly, and void much blood at the mouth; being taken in the water of plantane, horſetail, or the greater comfrey, it is a remedy againſt the poiſon of the ſcorpion, and reſiſteth all venoms and poiſons: the ſeed or leaves taken in wine is very good againſt the plague, and all infectious diſeaſes, and is very good in peſtilential fevers. The juice put into freſh or green wounds doth quickly cloſe the lips of them together, and is very effectual to heal all ulcers and ſores in the mouth; the juice dropped in the eyes taketh away the heat and inflammation in them: the diſtilled water of the herb hath the ſame properties, and may be uſed for the effect aforeſaid.

## BRANK-URSINE.

BESIDES the common name brank-urſine, it is alſo called bear's breech, and acanthus, though I think our Engliſh names more proper, for the Greek word acanthus ſignifies any thiſtle whatſoever.

Description. This thiſtle ſhoots forth very many large, thick, ſad-green, ſmooth, leaves upon the ground, with a very thick and juicy middle rib; the leaves are parted with ſundry deep gaſhes on the edge; the leaves remain a long time before any ſtalk appears; afterwards riſeth up a reaſonably-big ſtalk three or four feet high, and finely decked with flowers from the middle of the ſtalk upwards, for on the lower part of the ſtalk there is neither branch nor leaf; the flowers are hooded and gaping, being white in colour, and ſtanding in browniſh huſks, with a ſmall, long, undivided, leaf under each leaf; they ſeldom ſeed in our country; its roots are many, great, and thick, blackiſh without and whitiſh within, full of a clammy ſap; if you ſet a piece of them in a garden, defending it from the firſt winter's cold, it will grow and flouriſh.

Place. They are only nurſed up in gardens in England, where they will grow very well.

Time. It flowereth in June and July.

Government and Virtues. It is an excellent plant under the dominion of the Moon: I could wiſh ſuch as are ſtudious would labour to keep it in their gardens. Its leaves being boiled, and uſed in clyſters, are exceeding good to mollify the belly, and make the paſſage ſlippery; the decoction, drunk, is excellent good for the bloody flux; the leaves being bruiſed, or rather boiled, and applied like a poultice, are exceeding good to unite broken bones, and ſtrengthen joints that have been put out; the decoction of either the leaves or roots being drunk, and the decocted leaves applied to the place, is excellent good for the king's evil that is broken and runneth, for by the influence of the Moon it reviveth the ends of the veins which are relaxed; there is ſcarcely a better remedy to be applied to ſuch places as are burnt with fire than this is, for it fetcheth out the fire, and heals it without a ſcar; it is alſo an excellent remedy for ſuch as are burſten, being either taken inwardly or applied to the place; in like manner uſed, it helps the cramp and the gout; it is excellent good in hectic fevers, and reſtores radical moiſture to ſuch as are in conſumptions.

## BRIONY.

IT is called wild-vine, wood-vine, tamus, and our lady's ſeal; the white is called white-vine by ſome, and the black black-vine.

Description. The common white briony groweth creeping upon the hedges, ſending forth many long, rough, very tender, branches at the beginning, with many very rough broad leaves thereon, cut for the moſt part into five partitions, in form very like a vine-leaf, but ſmaller, rougher, and of a whitiſh or hoary-green colour, ſpreading very far, and twining with its ſmall claſpers, that come forth at the joints with the leaves, very faſt on whatſoever ſtandeth next to it; at the ſeveral joints alſo, eſpecially towards the tops of the branches, cometh forth a long ſtalk bearing many whitiſh flowers, together in a long tuft, conſiſting of ſmall branches each, laid open like a ſtar; after which come the berries, ſeparated one from another more than a cluſter of grapes, green at the firſt, and very red when they are thoroughly ripe; of no good ſcent, and of a moſt loathſome taſte, provoking vomit: the root groweth to be exceeding great, with many long twines or branches growing from it, of a pale whitiſh colour on the outſide, and more white within, and of a ſharp, bitter, loathſome, taſte.

Place. It groweth on banks, or under hedges, through this land, and the roots lie very deep.

Time. It flowereth in July and Auguſt, ſome earlier and ſome later than others.

Government and Virtues. They are furious martial plants: the roots of briony purge the belly with great violence, troubling the ſtomach and burning the liver, and therefore not raſhly to be taken, but, being corrected, are very profitable for the diſeaſes of the head, as falling ſickneſs, giddineſs, and ſwimmings, by drawing away much phlegm and rheumatic humours that oppreſs the head, as alſo the joints and ſinews; and therefore good for palſies, convulſions, cramps and ſtitches in the ſide, and the dropſy; and, in provoking urine, they cleanſe the reins and kidneys from the gravel and ſtone, by opening the obſtructions of the ſpleen, and conſuming the hardneſs and ſwellings thereof. If the juice be tempered with the meal of vetches or fenugreek, or boiled in oil till it be conſumed, it will take away black or blue ſpots, and Galen affirmeth, it is a plant profitable for tanners to thicken their leather hides with. The root ſpread upon a piece of ſheep's leather, in the manner of a plaiſter, while it is freſh and green, takes away black or blue marks, and all ſcars and deformities of the ſkin; it breaks hard impoſthumes, draws forth ſplinters and broken bones, diſſolves congealed blood, and, being laid on and uſed upon the hip, or huckle-bone, ſhoulders, arms, or any other part where there is great pain, it takes it away in a ſhort ſpace, and works very effectually. The decoction of the root in wine, drunk once a week at going to bed, cleanſeth the mother, and helpeth the riſing thereof, expelleth the dead child for fear of abortion; a drachm of the root in powder taken in white wine, bringeth down the courſes; an electuary, made of the roots and honey, doth mightily cleanſe the cheſt of rotten phlegm, and wonderfully helpeth an old ſtrong cough, thoſe that are troubled with ſhortneſs of breath, and is very good for them that are bruiſed inwardly, to help to expel the clotted or congealed blood: the leaves, fruit, and root, do cleanſe old and filthy ſores, are good againſt all running and fretting cankers, gangrenes, and tetters, and therefore the berries are by ſome country-people called tetter-berries. The root cleanſeth the ſkin wonderfully from all black and blue ſpots, freckles, morphew, leproſy, foul ſcars, or other deformity whatſoever; as alſo all running ſcabs and mangineſs are healed by the powder of the dried root, or the juice thereof, but eſpecially by the fine white hardened juice: the diſtilled water of the roots worketh the ſame effects, but more weakly: the root bruiſed, and applied of itſelf to any place where the bones are broken, helpeth to draw them forth, as alſo ſplinters and thorns in the fleſh; and, being applied with a little wine mixed therewith, it breaketh boils, and helpeth whitlows on the joints.

For all theſe latter complaints, that is to ſay, ſores, cankers, &c. apply it outwardly, and take my advice along with you; you ſhall find in the Diſpenſatory, among the preparations at the latter end, a medicine called *fæcula brioniæ*; take that and uſe it, (you have the way there how to make it,) and mix it with a little hog's greaſe, or other convenient ointment, and uſe it at your need.

As for the former diſeaſes, where it muſt be taken inwardly, it purgeth very violently, and needs an abler hand to correct it than moſt country-people have, therefore it is a better way for them, in my opinion, to let the ſimple alone, and take the compound water of it, mentioned in my Diſpenſatory, and that is far more ſafe, being wiſely corrected.

## BROOK-LIME.

IT is alſo called water-pimpernel.

Description. It riſeth forth from a creeping root, that ſhooteth forth ſtrings at every joint as it runneth, divers and ſundry green ſtalks, round and ſappy, with ſome branches on them, ſomewhat broad, round, deep, green, and thick, leaves ſet by couples thereon; from the boſom whereof ſhoot forth long footſtalks, with ſundry ſmall blue flowers on them, that conſiſt of five ſmall round-pointed leaves each.

There is another ſort nothing differing from the former, but that it is greater, and the flowers of a paler-blue colour.

Place. They ſometimes grow in ſmall ſtanding waters, but generally near water-creſſes.

Time. They flower in June and July, giving ſeed the month after.

Government and Virtues. It is a hot and biting martial plant: brook-lime and water-creſſes are generally uſed together in diet-drinks, with other things, ſerving to purge the blood and body from ill humours that would deſtroy health, and are helpful for the ſcurvy: they do alſo provoke urine, and help to break the ſtone and paſs it away; they provoke women's courſes, and expel the dead child. Being fried with butter and vinegar, and applied warm, it helpeth all manner of tumours, ſwellings, and inflammations.

Such drinks ought to be made of ſundry herbs according to the malady offending. I ſhall give a plain and eaſy rule for that purpoſe at the latter end of this book.

## BUTCHER's BROOM.

IT is called ruſcus and bruſcus, knee-holm, knee-holly, knee-hulver, and pettigree.

Description. The firſt ſhoots that ſprout from the root of butcher's broom are thick, whitiſh, and ſhort, ſomewhat like thoſe of aſparagus, but greater; they, riſing up to be a foot and a half high, are ſpread into divers branches, green and ſomewhat creſted with the roundneſs, tough and flexible, whereon are ſet ſomewhat broad and almoſt round hard leaves, and prickly pointed at the ends, of a dark-green colour, two for the moſt part ſet at a place, very cloſe or near together; about the middle of the leaf, on the back and lower ſide from the middle rib, breaketh forth a ſmall whitiſh-green flower, conſiſting of four ſmall round-pointed leaves, ſtanding upon little or no footſtalk, and in the place whereof cometh a ſmall round berry, green at the firſt, and red when it is ripe, wherein are two or three white, hard, round, ſeeds, contained; the root is thick, white, and great at the head, and from thence ſendeth forth divers thick, white, long, tough, ſtrings.

Place. It groweth in coppices, and on heaths and waſte grounds, and oftentimes under or near the holly-buſhes.

Time. It ſhooteth forth its young buds in the ſpring, and the berries are ripe in or about September: the branches or leaves abiding green all the winter.

Government and Virtues. It is a plant of Mars, being of a gallant cleanſing and opening quality; the decoction of the roots, made with wine, openeth obſtructions, provoketh urine, helpeth to expel gravel, and the ſtone, the ſtranguary, and women's courſes, as alſo the yellow-jaundice, and the head-ach; and, with ſome honey or ſugar put therein, cleanſeth the breaſt of phlegm, and the cheſt of much clammy humours gathered therein; the decoction of the root drunk, and a poultice made of the berries and leaves being applied, are effectual in knitting and conſolidating broken bones, or parts out of joint. The common way of uſing it, is to boil the roots of it and parſley, and fennel, and ſmallage, in white wine, and drink the decoction, adding the like quantity of graſs-roots to them: the more of the roots you boil, the ſtronger will the decoction be; it works no ill effects, yet I hope you have wit enough to give the ſtrongeſt decoction to the ſtrongeſt bodies.

## BROOM AND BROOM-RAPE.

TO ſpend time in writing a deſcription hereof is altogether needleſs, it being ſo generally uſed by all the good houſewives almoſt through this land to ſweep their houſes with, and therefore very well known to all ſorts of people.

The broom-rape ſpringeth up on many places from the roots of the broom, but more often in fields, or by hedge-ſides, and on heaths. The ſtalk thereof is of the bigneſs of a finger or thumb, above two feet high, having a ſhow of leaves on them, and many flowers at the top, of a deadiſh-yellow colour, as alſo the ſtalks and leaves are.

Place. They grow in many places of this land commonly, and as commonly ſpoil all the land they grow in.

Time. They flower in ſummer months, and give their ſeed before winter.

Government and Virtues. The juice or decoction of the young branches or ſeed, or the powder of the ſeed taken in drink, purgeth downwards and draweth phlegmatic and watery humours from the joints, whereby it helpeth the dropſy, gout, ſciatica, and pains in the hips and joints: it alſo provoketh ſtrong vomits, and helpeth the pains of the ſides, and ſwellings of the ſpleen; cleanſeth alſo the reins or kidneys and bladder of the ſtone, provoketh urine abundantly, and hindereth the growing again of the ſtone in the body. The continual uſe of the powder of the leaves and ſeed doth cure the black-jaundice: the diſtilled water of the flowers is profitable for all the ſame purpoſes; it alſo helpeth ſurfeits, and altereth the fits of agues, if three or four ounces thereof, with as much of the water of the ſmaller-centaury, and a little ſugar put therein, be taken a little before the fit cometh, and the party be laid down to ſweat in bed. The oil or water, that is drawn from the ends of the green ſticks heated in the fire, helps the tooth-ach. The juice of the young branches made into an ointment of old hog's greaſe and anointed, or the young branches bruiſed and heated in oil or hog's greaſe, and laid to the ſides pained by wind, as in ſtitches, or the ſpleen, eaſeth them in once or twice uſing; the ſame, boiled in oil, is the ſafeſt and ſureſt medicine to kill lice in the head or body; and is an eſpecial remedy for joint-achs and ſwollen knees that come by the falling down of humours.

The broom-rape alſo is not without its virtues. The decoction thereof in wine is thought to be as effectual to avoid the ſtone in the kidneys and bladder, and to provoke urine, as the broom itſelf. The juice thereof is a ſingular good help to cure as well green wounds as old and filthy ſores and malignant ulcers; the inſolate oil, wherein there has been three or four repetitions of infuſion of the top ſtalks with the flowers ſtrained and cleared, cleanſeth the ſkin from all manner of ſpots, marks, and freckles, that ariſe either by the heat of the ſun or the malignity of humours. As for the broom and broom-rape, Mars owns them; and it is exceeding prejudicial to the liver, I ſuppoſe by reaſon of the antipathy between Jupiter and Mars: therefore, if the liver be diſaffected, adminiſter none of it.

## BUCKSHORN PLANTANE.

Description. THIS, being ſown of ſeed, riſeth up at the firſt with ſmall, long, narrow, hairy, dark-green, leaves, like graſs, without any diviſion or gaſh in them; but thoſe that follow are gaſhed in on both ſides the leaves into three or four gaſhes, and pointed at the ends, reſembling the knags of a buck's horn, whereof it took its name; and being well grown round about the root upon the ground, in order one by another, thereby reſembling the form of a ſtar, from among which riſe up divers hairy ſtalks, about a hand-breadth high, bearing every one a ſmall, long, ſpiky, head, like to thoſe of the common plantane, having ſuch-like bloomings and ſeed after them: the root is ſingle, long, ſmall, and ſtringy.

Place. They grow in dry ſandy ground, as in Tothill-fields, Weſtminſter, and many other places in this kingdom.

Time. They flower and ſeed in May, June, and July; and their leaves, in a manner, abide green all the winter.

Government and Virtues. It is under the dominion of Saturn, and is of a drying and binding quality: this boiled in wine and drunk, and ſome of the leaves applied to the hurt place, is an excellent remedy for the biting of the viper or adder, which I take to be one and the ſame; the ſame, being alſo drunk, helpeth thoſe that are troubled with the ſtone in the reins or kidneys, by cooling the heat of the parts afflicted, and ſtrengthening them; as alſo weak ſtomachs that cannot retain, but caſt up, their meat; it ſtayeth bleedings at the mouth and noſe, bloody urine, or the bloody flux, and ſtoppeth the laſk of the belly and bowels: the leaves hereof bruiſed, and laid to their ſides that have an ague, ſuddenly eaſe the fit; and the leaves and roots beaten with ſome bay-ſalt, and applied to the wriſts, work the ſame effects; the herb boiled in ale or wine, and given for ſome mornings and evenings together, ſtayeth the diſtillations of hot and ſharp rheum falling into the eyes from the head, and helpeth all ſorts of ſore eyes.

## BUCKSHORN.

IT is alſo called hartſhorn, herbaſtella and herbaſtellaria, ſanguinaria, herb-eve, herb-ivy, wort-creſſes, and ſwine-creſſes.

Description. It has many ſmall and weak ſtraggling branches trailing here and there upon the ground; the leaves are many, ſmall, and jagged, not much unlike to thoſe of buckſhorn plantane, but much ſmaller, and not ſo hairy: the flowers grow among the leaves in ſmall, rough, whitiſh, cluſters; the ſeeds are ſmaller and browniſh, and of a bitter taſte.

Place. They grow in dry, barren, and ſandy, grounds.

Time. They flower and ſeed with the other plantanes.

Government and Virtues. This is alſo under the dominion of Saturn: the virtues are held to be the ſame as buckſhorn plantane, and therefore by all authors it is joined with it: the leaves, being bruiſed, and applied to warts, will make them conſume and waſte away in a ſhort time.

## BUGLE.

BESIDES the name bugle, it is called middle-confound, and middle-comfrey, brown-bugle, and by ſome ſicklewort and herb-carpenter, though in Suſſex they call another herb by that name.

Description. This hath larger leaves than thoſe of the ſelf-heal, but elſe of the ſame faſhion, or rather a little longer; in ſome green on the upper ſide, and in others rather browniſh, dented about the edges, ſomewhat hairy, as the ſquare ſtalk is alſo, which riſeth up to be half a yard high ſometimes, with the leaves ſet by couples; from the middle almoſt whereof upwards ſtand the flowers together, with many ſmaller and browner leaves than the reſt on the ſtalk below, ſet at diſtances, and the ſtalk bare between them; among which flowers are alſo ſmall ones, of a bluiſh, and ſometimes of an aſh, colour, faſhioned like the flowers of the ground-ivy, after which come ſmall, round, blackiſh, ſeed: the root is compoſed of many ſtrings, and ſpreadeth upon the ground.

The white bugle differeth not in form or greatneſs from the former, ſaving that the leaves and ſtalks are always green, and the flowers are white.

Place. It grows in woods, coppices, and fields, generally throughout England, but the white-flowered bugle is not ſo plentiful as the other.

Time. They flower from May till July, and in the mean time perfect their ſeed; the root, and the leaves next the ground, abiding all the winter.

Government and Virtues. This herb is belonging to Venus: if the virtues of it make you in love with it, (as they will if you are wiſe,) keep a ſyrup of it to take inwardly, and an ointment and plaiſter of it to uſe outwardly, always by you. The decoction of the leaves and flowers, made in wine, and taken, diſſolveth the congealed blood in thoſe that are bruiſed inwardly by a fall or otherwiſe, and is very effectual for any inward wounds, thruſts, or ſtabs in the body or bowels, and is a ſpecial help in all wound-drinks, and for thoſe that are liver-grown as they call it. It is wonderful in curing all manner of ulcers and ſores, whether new and freſh or old and inveterate, and even gangrenes and fiſtulas, if the leaves are bruiſed and applied, or the juice uſed to waſh and bathe the places; and the ſame, made into a lotion with ſome honey and allum, cureth all ſores of the mouth or gums, be they ever ſo foul, or of long continuance; and worketh no leſs powerfully and effectually for ſuch ulcers and ſores as happen in the ſecret parts of men or women. Being alſo taken inwardly or outwardly applied, it helpeth thoſe that have broken any bone, or have any member out of joint. An ointment, made with the leaves of bugle, ſcabious, and ſanicle, bruiſed, and boiled in hog's greaſe until the herbs be dry, and then ſtrained forth into a pot, for ſuch occaſions as ſhall require it, is ſo ſingularly good for all ſorts of hurts in the body, that none who know its uſefulneſs will be without it. The truth is, I have known this herb cure ſome diſeaſes of Saturn, of which I have thought good to quote one. Many times ſuch as give themſelves much to drinking are troubled with ſtrange fancies and ſights in the night-time, and ſome with voices, as alſo with the diſeaſe *ephialtes*, or the mare: I take the reaſon of this to be, according to Fernelius, a melancholy vapour, made thin by exceſſive drinking ſtrong liquor, which flies up and diſturbs the fancy, and breeds imaginations like itſelf, i. e. fearful and troubleſome. Theſe I have known cured by taking only two ſpoonfuls of the ſyrup of this herb about two hours after ſupper, when you go to bed: but whether this is done by ſympathy or antipathy is rather doubtful; all that know any thing in aſtrology know that there is great antipathy between Saturn and Venus in matters of procreation, yea, ſuch a one, that the barrenneſs of Saturn can be removed by none but Venus, nor the luſt of Venus be repelled by any but Saturn; but I am not yet of opinion it is done this way; my reaſon is, becauſe theſe vapours, though in quality melancholy, yet by their flying upward ſeem to be ſomething aerial; therefore I rather think it is done by ſympathy, Saturn being exalted in Libra, the houſe of Venus.

## BURNET.

IT is alſo called ſanguiſorba, pimpinella, bipenula, ſolbegrella, &c. Common garden burnet is ſo well known that it needeth no deſcription; but there is another ſort which is wild, the deſcription whereof take as followeth.

Description. The great wild burnet hath winged leaves riſing from the roots like the garden burnet, but not ſo many; yet each of theſe leaves are at leaſt twice as large as the other, and nicked in the ſame manner about the edges, of a greyiſh colour on the under ſide; the ſtalks are larger and riſe higher, with many ſuch-like leaves ſet thereon, and greater heads at the tops, of a browniſh-green colour; and out of them come ſmall, dark, purple, flowers, like the former, but larger: the root is black and long like the other, but alſo greater; it hath almoſt neither ſcent nor taſte therein like the garden kind.

Place. The firſt grows frequently in gardens; the wild kind groweth in divers counties of this kingdom, eſpecially in Huntingdon and Northamptonſhires in the meadows there; as alſo near London by Pancras church, and by a cauſeway-ſide in the middle of a field by Paddington.

Time. They flower about the end of June and beginning of July, and their ſeed is ripe in Auguſt.

Government and Virtues. It is an herb the Sun challengeth dominion over, and is a moſt precious herb, little inferior to betony; the continual uſe of it preſerves the body in health, and the ſpirits in vigour; for, if the Sun be the preſerver of life under God, his herbs are the beſt in the world to do it by. They are accounted to be both of one property, but the ſmaller is the moſt effectual, becauſe quicker and more aromatical; it is a friend to the heart, liver, and other principal parts of a man's body: two or three of the ſtalks with leaves put into a cup of wine, eſpecially claret, are known to quicken the ſpirits, refreſh and cheer the heart, and drive away melancholy; it is a ſpecial help to defend the heart from noiſome vapours, and from infection of the peſtilence, the juice thereof being taken in ſome drink, and the party laid to ſweat immediately. They have alſo a drying and an aſtringent quality, whereby they are available in all manner of fluxes of blood or humours, to ſtaunch bleedings inward or outward; laſks, ſcourings, the bloody flux, women's too-abundant courſes, the whites, and the choleric belchings and caſtings of the ſtomach; and is a ſingularly good herb for all ſorts of wounds both of the head and body, either inward or outward; for all old ulcers, or running cankers, and moiſt ſores; to be uſed either by the juice or the decoction of the herb, or by the powder of the herb or root, or the water of the diſtilled herb, or ointment by itſelf, or with other things to be kept. The ſeed is alſo no leſs effectual both to ſtop fluxes and dry up moiſt ſores, being taken in powder inwardly in wine or ſteeled water, that is, wherein hot gads of ſteel have been quenched; or the powder of the ſeed mixed with the ointments.

## BUTTER-BUR.

THIS herb is called petaſitis.

Description. It riſeth up in February, with a thick ſtalk about a foot high, whereon are ſet a few ſmall leaves, or rather pieces, and at the tops a long ſpiked head of flowers, of a bluſh or deep red colour, according to the ſoil wherein it groweth; and, before the ſtalk with the flowers have been a month above ground, they will be withered and gone, and blown away with the wind, and the leaves will begin to ſpring, which being full blown are very large and broad, being ſomewhat thin and almoſt round, whoſe thick red footſtalks, about a foot long, ſtand towards the middle of the leaves; the lower part being divided into two round parts, cloſe almoſt one to another, of a pale green colour, and hoary underneath: the root is long and ſpreading under the ground, being in ſome places no bigger than one's finger, in others larger, rather blackiſh on the outſide and white within, and of a very bitter and unpleaſant taſte.

Place and Time. They grow in low and wet grounds by rivers and waterſides; their flowers (as is ſaid) riſing and decaying in February and March, before the leaves, which appear in April.

Government and Virtues. It is under the dominion of the ſun, and therefore is a great ſtrengthener of the heart, and cheers the vital ſpirits. The excellent Fuchsius, in his account of this herb, is moſt expreſs, and records its virtue as wonderful in peſtilential fevers; and this he ſpeaks not from tradition, but his own experience. Were it needful to prove the ſun gives light, it is ſcarce leſs certain, or leſs obvious, than that this root, beyond all things elſe, cures peſtilential fevers. Its roots are by long experience found to be very available againſt the plague and peſtilential fevers, by provoking ſweat; if the powder thereof be taken in wine, it alſo reſiſteth the force of any other poiſon: the root taken with the zedoary and angelica, or without them, helps the riſing of the mother; the decoction of the root in wine is ſingular good for thoſe that wheeze much, or are ſhort-winded; it provoketh urine alſo and women's courſes, and killeth flat and broad worms in the belly; the powder of the root doth wonderfully help to dry up the moiſture of ſores that are hard to be cured, and taketh away all ſpots and blemiſhes of the ſkin.

## BURDOCK.

THEY are alſo called perſonata, bardona, lappa major, great burdock, and clotbur. It is ſo well known, even to the little boys who pull off the burs to throw and ſtick on each other, that I ſhall omit writing any deſcription of it.

Place. It grows plentifully by ditches and water-ſides, and by the highways, almoſt every where throughout this land.

Government and Virtues. Venus challengeth this herb for her own; and, by its ſeed or leaf, you may draw the womb which way you pleaſe, either upward by applying it to the crown of the head, in caſe it falls out, or downward in fits of the mother, by applying it to the ſoles of the feet; or, if you would ſtay it in its place, apply it to the navel, and that is likewiſe a good way to ſtay the child in it: the bur-leaves are cooling, moderately drying, and diſcuſſing withal, whereby they are good for old ulcers and ſores. A drachm of the roots, taken with pine-kernels, helpeth them that ſpit foul, mattery, and bloody, phlegm; the leaves applied to the places troubled with the ſhrinking of the ſinews or arteries, give much eaſe: the juice of the leaves, or rather the roots themſelves, given to drink with old wine, doth wonderfully help the bitings of ſerpents; and the root beaten with a little ſalt, and laid on the place, ſuddenly eaſeth the pain thereof, and helpeth thoſe that are bit by a mad dog: the juice of the leaves, taken with honey, provoketh urine, and remedieth the pain of the bladder: the ſeed being drunk in wine forty days together, doth wonderfully help the ſciatica: the leaves bruiſed with the white of an egg, and applied to any place burnt with fire, take out the fire, give ſudden eaſe, and heal it up afterwards. The decoction of them, fomented on any fretting ſore or canker, ſtayeth the corroding quality, which muſt be afterwards anointed with an ointment made of the ſame liquor, hog's greaſe, nitre, and vinegar, boiled together. Its roots may be preſerved with ſugar, and taken faſting, or at other times, for the ſaid purpoſes, and for conſumptions, the ſtone, and the laſk: the ſeed is much commended to break the ſtone, and cauſeth it to be expelled by urine, and is often uſed with other ſeeds, and things to that purpoſe.

## BUCK-WHEAT.

Names. IN moſt counties of England this grain goeth by the general name of French wheat, as in Hampſhire, Surry, Berkſhire, Wiltſhire, and Buckinghamſhire, and eſpecially in thoſe barren parts of the counties where it is moſt uſually ſown and delighteth to grow; it is alſo in many parts of England called buck-wheat: ſome take it to be the *eryſimum* of Theophraſtus, and the *ireo* of Pliny, and it is called by Mathiolus *frumentum ſaraſenicum*; the Dutch names are *bockweydt* and *buckenweydt*.

Description. It riſeth up with divers round hollow reddiſh ſtalks, ſet with divers leaves, each by itſelf on a ſtalk, which is broad and round, and lies forked at the bottom, ſmall and pointed at the end, ſomewhat reſembling an ivy-leaf, but that it is ſofter in handling; at the top of the ſtalks come forth divers cluſters of ſmall white flowers, which turn into ſmall three-cornered blackiſh ſeed, with a white pulp therein; the root is ſmall and thready.

Place and Time. It is ſaid to have its original birth-place in Arabia, whereby it had the Latin name *frumentum ſaraſenicum*, and was tranſplanted from thence into Italy, but now is very commonly ſown in moſt of our northern counties, where, for the uſe and profit made of it, many fields are ſown therewith; it is not uſually ſown before April, and ſometimes in May, for at its firſt ſpringing up a froſty night kills it all, and ſo it will do the flowers when it bloſſoms; it is ripe at the latter end of Auguſt, or the beginning of September, and will grow in a dry, hungry ground, for which it is held as good as a dunging.

Government and Virtues. This grain is attributed to Venus: it doth nouriſh leſs than wheat, rye, or barley, but more than millet or panic, and the bread or cakes made of the meal thereof doth eaſily digeſt, and ſoon paſs out of the ſtomach, though ſome hold to the contrary; it giveth ſmall nouriſhment, though not bad, and is withal a little flatulent or windy, yet country-people in divers parts of Germany and Italy do feed hereon as almoſt their only bread-corn, and are ſtrong and luſty perſons, following hard labour; the bread or cakes made thereof are pleaſant, but do ſomewhat preſs or lie heavy on the ſtomach. I never knew any bread or cakes made of it for people to eat in this country, but it is generally uſed to fatten hogs and poultry of all ſorts, which it doth very exceedingly and quickly: the phyſical uſes of it are theſe, it provoketh urine, increaſeth milk, looſeneth the belly, and, being taken in wine, is good for melancholy perſons; the juice of the leaves dropped into the eyes cleareth the ſight.

## BLACK BIND-WEED.

Name. IT is alſo called with-wind.

Decription. Black bind-weed hath ſmooth red branches, very ſmall, like great threads, wherewith it wrappeth and windeth itſelf about trees, hedges, ſtakes, and every thing it can lay hold upon; the leaves are like to ivy, but ſmaller and more tender; the flowers are white and very ſmall; the ſeed is black, triangular or three-ſquare, growing thick together; every ſeed is cloſed and covered with a thin ſkin; the root is ſmall and tender as a thread.

Place. It groweth in borders of fields and gardens, about hedges and ditches, and amongſt herbs.

Time. It delivereth its ſeed in Auguſt and September, and afterwards periſheth.

Government and Virtues. Bind-weed is a plant of Mercury, of a hot nature, and of ſubtil parts, having power to diſſolve; the juice of the leaves, being drunk, do looſen and open the belly; and being pounded, and laid to the grieved place, diſſolveth, waſteth, and conſumeth, hard ſwellings.

## BALSAM-TREE.

THE Arabians call it *baleſſan*, the Greeks βαλσαμιν, and the Latins *balſamum*; the liquor they call *opobalſamum*, the berries or fruit of the tree *carpobalſamum*, and the ſprigs or young branches thereof *zylobalſamum*.

Description. The balſam or balm-tree, in the moſt natural places where it groweth, is never very large, ſeldom more than eight or nine feet high, and in ſome places much lower, with divers ſmall and ſtraight ſlender branches iſſuing from them, of a browniſh-red colour, eſpecially the younger twigs, covered with a double bark, the red firſt and a green one under it, which are of a very fragrant ſmell, and of an aromatical quick taſte, ſomewhat aſtringent and gummy, cleaving to the fingers; the wood under the bark is white, and as inſipid as any other wood; on theſe branches come forth ſparſedly and without order, many ſtalks of winged leaves, ſomewhat like unto thoſe of the maſtic-tree, the loweſt and thoſe that firſt come forth conſiſting but of three leaves, others of five or ſeven leaves, but ſeldom more; which are ſet by couples, the loweſt ſmalleſt, and the next bigger, and the uppermoſt largeſt of all; of a pale-green colour, ſmelling and taſting ſomewhat like the bark of the branches, ſomewhat clammy alſo, and abide on the buſhes all the year: the flowers are many and ſmall, ſtanding by three together on ſmall ſtalks at the ends of the branches, made of ſix ſmall white leaves a-piece, after which follow ſmall browniſh hard berries, little bigger than juniper-berries, ſmall at both ends, creſted on the ſides, and very like unto the berries of the turpentine-tree, of a very ſharp ſcent, having a yellow honey-like ſubſtance in them, ſomewhat bitter, but aromatical in taſte, and biting on the tongue like the *opobalſamum*; from the body hereof being cut there iſſueth forth a liquor (which ſometimes floweth without ſcarifying) of a thick whitiſh colour at the firſt, but afterwards groweth oily, and is ſomewhat thicker than oil in ſummer, and of ſo ſharp a ſcent that it will pierce the noſtrils of thoſe that ſmell thereto; it is almoſt like unto oil of ſpike, but as it groweth older ſo it groweth thicker, and not ſo quick in the ſmell, and in colour becoming yellow like honey or brown thick turpentine as it groweth old.

Place and Time. The moſt reputed natural places where this tree hath been known to grow, both in theſe and former days, are Arabia Felix, about Mecca and Medina, and a ſmall village near them called Bedrumia, and the hills, valleys, and ſandy grounds, about them, and the country of the Sabeans adjoining next thereunto; and from thence tranſplanted into India and Egypt: it likewiſe grew on the hills of Gilead. It is reported, that the Queen of Sheba brought of the balſam-trees to Solomon, as the richeſt of her preſents, who cauſed them to be planted in orchards, in the valley of Jericho, where they flouriſhed, and were tended and yearly pruned, until they, together with the vineyards in that country, were deſtroyed by that monſter of mankind, the ſavage beſtial Turk. It flowereth in the ſpring, and the fruit is ripe in autumn.

Government and Virtues. This balſam-tree is a ſolar plant, of temperature hot and dry in the ſecond degree, and is ſweet in ſmell, being of thin parts, but the liquor or *opobalſamum* is of more thin parts than the plant itſelf; the fruit or berries is very like it in quality, but far inferior thereunto in the ſubtilty: the liquor or *opobalſamum* is of good uſe againſt the poiſons or infections of vipers, ſerpents, and ſcorpions, the peſtilence and ſpotted fever, and other putrid and intermiſſive agues that ariſe from obſtructions, and crude cold humours, to take a ſcruple or two in drink, for ſome days together, and to ſweat thereon; for this openeth the obſtructions of the liver and ſpleen, and digeſteth thoſe raw humours in them, cheriſhing the vital ſpirits, radical moiſture, and natural heat, in them, and is very effectual in cold griefs and diſeaſes of the head or ſtomach, helping the ſwimmings and turnings of the brain, weak memories, and falling ſickneſs; it cleareth the eyes of films or ſkins, and eaſeth pains in the ears: it helpeth a cough, ſhortneſs of breath, and conſumption of the lungs, warming and drying up the diſtillations of rheums upon them, and all other diſeaſes of the ſtomach proceeding of cold or wind; the cold or windy diſtempers of the bowels, womb, or mother, which cauſe torments, or pains, or the cold moiſtures procuring barrenneſs. It provoketh the courſes, expelleth the dead and after births, cures the flux of the whites and ſtopping of urine; it cleanſeth the reins and kidneys, and expelleth the ſtone and gravel; it is very good againſt the palſey, cramp, tremblings, convulſions, ſhrinking of the ſinews, and green wounds.

## CABBAGES AND COLEWORTS.

I SHALL ſpare a labour in writing a deſcription of theſe, ſince almoſt every one that can but write at all may deſcribe them from his own knowledge, they being generally ſo well known that deſcriptions are altogether needleſs.

Place. Theſe are generally planted in gardens.

Time. Their flowering time is towards the middle or end of July, and the ſeed is ripe in Auguſt.

Government and Virtues. The cabbages or coleworts boiled gently in broth, and eaten, do open the body, but the ſecond decoction doth bind the body: the juice thereof drunk in wine, helpeth thoſe that are bitten by an adder; and the decoction of the flowers bringeth down women's courſes. Being taken with honey, it recovereth hoarſeneſs or loſs of voice; the often eating of them, well boiled, helpeth thoſe that are entering into a conſumption: the pulp of the middle ribs of colewort, boiled in almond-milk, and made up into an electuary with honey, being taken often, is very profitable for thoſe that are purſy or ſhort-winded; being boiled twice, and an old cock boiled in the broth, and drunk, helpeth the pains and obſtructions of the liver and ſpleen, and the ſtone in the kidneys; the juice boiled with honey, and dropped into the corner of the eyes, cleareth the ſight, by conſuming any film or cloud beginning to dim it; it alſo conſumeth the canker growing therein. They are much commended being eaten before meat to keep one from ſurfeiting, as alſo from being drunk with too much wine, and quickly make a drunken man ſober; for, as they ſay, there is ſuch an antipathy or enmity between the vine and the colewort, that the one will die where the other groweth. The decoction of coleworts taketh away the pains and achs, and allayeth the ſwellings of ſwoln or gouty legs and knees, wherein many groſs and watery humours are fallen, the place being bathed therewith warm: it helpeth alſo old and filthy ſores, being bathed therewith, and healeth all ſmall ſcabs, puſhes, and wheals, that break out in the ſkin: the aſhes of colewort-ſtalks, mixed with old hog's greaſe, are very effectual to anoint the ſide of thoſe that have had long pains therein, or any other place pained with melancholy and windy humours. Cabbages are extreme windy, whether you take them as meat or as medicine; but colewort-flowers are ſomething more tolerable, and the wholeſomer food of the two. The Moon challengeth the dominion of the herb.

## SEA-COLEWORT.

Description. THIS hath divers ſomewhat long, broad, large, thick, wrinkled, leaves, crumpled upon the edges, growing each upon a ſeveral thick footſtalk, very brittle, of a greyiſh green colour; from among which riſeth up a ſtrong thick ſtalk, two feet high, or more, with ſome leaves thereon to the top, where it brancheth forth much, and on every branch ſtandeth a large buſh of pale whitiſh flowers, conſiſting of four leaves each: the root is ſomewhat large, and ſhooteth forth many branches under ground, keeping green leaves all the winter.

Place. They grow in many places upon the ſea-coaſts, as well on the Kentiſh as Eſſex ſhores; as, at Lid in Kent, Colcheſter in Eſſex, and divers other places, and in other counties, of this land.

Time. They flower and ſeed about the time the other kinds do.

Government and Virtues. The Moon claims the dominion of theſe alſo. The broth or firſt decoction, of the ſea-colewort, doth, by the ſharp, nitrous, and bitter, qualities therein, open the belly and purge the body; it cleanſeth and digeſteth more powerfully than the other kind; the ſeed hereof, bruiſed and drunk, killeth worms: the leaves, or the juice of them, applied to ſores or ulcers, cleanſe and heal them, diſſolve ſwellings, and take away inflammations.

## CALAMINT.

IT is called alſo mountain mint.

Description. It is a ſmall herb, ſeldom riſing above a foot high, with ſquare, hairy, and woody, ſtalks, and two ſmall hoary leaves ſet at a joint, about the bigneſs of marjoram, or not much bigger, a little dented about the edges, and of a very fierce or quick ſcent, as the whole herb is: the flowers ſtand at ſeveral ſpaces of the ſtalks, from the middle almoſt upwards, which are ſmall and gaping like the common mint, and of a pale bluſh colour; after which follow ſmall, round, blackiſh, ſeeds; the root is ſmall and woody, with divers ſmall ſprigs ſpreading within the ground: it abideth many years.

Place. It groweth on heaths, and upland dry grounds, in many counties of this kingdom.

Time. They flower in July, and their ſeed is ripe quickly after.

Government and Virtues. It is an herb of Mercury, and a ſtrong one too, therefore excellent good in all afflictions of the brain; the decoction of the herb, being drunk, bringeth down women's courſes, and provoketh urine; it is profitable for thoſe that are burſten, or troubled with convulſions or cramps, with ſhortneſs of breath, or choleric torments or pains in the belly or ſtomach; it alſo helpeth the yellow jaundice, and, being taken in wine, ſtayeth vomiting; taken with ſalt and honey, it killeth all manner of worms in the body; it helpeth ſuch as have the leproſy, either taken inwardly, drinking whey after it, or the green herb outwardly applied; it hindereth conception in women, being either burned or ſtrewed in the chamber; it driveth away venomous ſerpents. It takes away black and blue marks in the face, and maketh black ſcars become well-coloured, if the green herb be boiled in wine, and laid to the place, or the place waſhed therewith: being applied to the huckle-bone, by continuance of time it ſpendeth the humours which cauſe the pains of the ſciatica; the juice, dropped into the ears, killeth the worms in them; the leaves, boiled in wine, and drunk, provoke ſweat, and open obſtructions of the liver and ſpleen. It helpeth them that have a tertian ague, the body being firſt purged, by taking away the cold fits; the decoction hereof, with ſome ſugar put thereto, is very profitable for thoſe that are troubled with the overflowing of the gall, and alſo for thoſe that have an old cough, and that are ſcarce able to breathe by ſhortneſs of their wind; that have any cold diſtemper in their bowels, and are troubled with the hardneſs of the ſpleen; for all which purpoſes both the powder called diacaluminthes, and the compound ſyrup of calamint, (which are to be had at the apothecaries,) are moſt effectual. Let no women be too buſy with it, for it works very violently upon the female ſubject.

## CAMOMILE.

IT is ſo well known every where, that it is but loſt time and labour to deſcribe it. The virtues thereof are as follow:

A decoction made of camomile, and drunk, taketh away all pains and ſtitches in the ſides: the flowers of camomile, beaten and made up into balls with oil, drive away all ſorts of agues, if the party grieved be anointed with that oil, taken from the flowers, from the crown of the head to the ſole of the foot, and afterwards laid to ſweat in his bed; this is Nicheſſor an Egyptian's medicine. It is profitable for all ſorts of agues that come either from phlegm or melancholy, or from an inflammation of the bowels, being applied when the humours cauſing them ſhall be concocted; and there is nothing more profitable to the ſides and region of the liver and ſpleen than this; the bathing with a decoction of camomile taketh away wearineſs, eaſeth pains to what part of the body ſoever it be applied; it comforteth the ſinews that are overſtrained; mollifieth all ſwellings; it moderately comforteth all parts that have need of warmth; digeſteth and diſſolveth whatſoever hath need thereof by a wonderful and ſpeedy property. It eaſeth all the pains of the cholic and ſtone, and all pains and torments of the belly, and gently provoketh urine: the flowers, boiled in poſſet-drink, provoke ſweat, and help to expel colds, achs, and pains, whereſoever, and are an excellent help to bring down women's courſes; a ſyrup made of the juice of camomile with the flowers and white wine, is a remedy againſt the jaundice and dropſy; the flowers, boiled in lye, are good to waſh the head, and comfort both it and the brain; the oil, made of the flowers of camomile is much uſed againſt all hard ſwellings, pains, or achs, ſhrinking of the ſinews, or cramps or pains in the joints, or any other part of the body; being uſed in clyſters, it helpeth to diſſolve wind and pains in the belly; anointed alſo, it helpeth ſtitches and pains in the ſides.

Nicheſſor ſaith, the Egyptians dedicated it to the Sun becauſe it cured agues; and they were like enough to do it, for they are the moſt ſuperſtitious people in their religion I ever read of. Bacchinus, Pena, and Lobel, commend the ſyrup made of the juice of it and ſugar, taken inwardly, to be excellent for the ſpleen. Alſo this is certain, that it moſt wonderfully breaks the ſtone; ſome take it in ſyrup or decoction, others inject the juice of it into the bladder with a ſyringe: my opinion is, that the ſalt of it, taken half a drachm in the morning in a little white or rheniſh wine, is better than either; that it is excellent for the ſtone, appears in this which I have ſeen tried, viz. That a ſtone that hath been taken out of the body of a man, being wrapped in camomile, will in a ſhort time diſſolve.

## WATER-CALTROPS.

THEY are called alſo, *tribulus aquaticus*, *tribulus lacuſtris*, *tribulus marinus*, caltrops, ſaligot, water-nuts, and water-cheſnuts.

Description. As for the greater ſort, or water-caltrop, it is but very rarely found here: two other ſorts there are, which I ſhall here deſcribe.---The firſt hath a long, creeping, and jointed root, ſending forth tufts at each joint, from which joints ariſe, long, flat, ſlender, knotted, ſtalks, even to the top of the water, divided towards the top into many branches, each carrying two leaves on both ſides, being about two inches long and half an inch broad, thin, and almoſt tranſparent; they look as though they were torn; the flowers are long, thick, and whitiſh, ſet together almoſt like a bunch of grapes, which being gone, there ſucceed, for the moſt part, four ſharp-pointed grains all together, containing a ſmall white kernel in them.

The ſecond differs not much from this, except that it delights in more clear water; its ſtalks are not flat, but round; its leaves are not ſo long, but more pointed. As for the place, we need not determine, for their name ſhews they grow in the water.

Government and Virtues. It is under the dominion of the moon, and, being made into a poultice, is excellent good for hot inflammations and ſwellings, cankers, ſore throats and mouths, being waſhed with the decoction; it cleanſeth and ſtrengtheneth the neck and throat much, and helpeth thoſe ſwellings, which when people have, they ſay the almonds of the ears are fallen down; it is excellent good for the ſtone and gravel, eſpecially the nuts being dried; they alſo reſiſt poiſon, and bitings of venomous beaſts.

## WILD CAMPIONS.

Description. THE wild white campion hath many long and ſomewhat broad dark green leaves lying upon the ground, with divers roots therein, ſomewhat like plantane, but rather hairy, broader, and not ſo long; the hairy ſtalks riſe up in the middle of them three or four feet high, and ſometimes more, with divers great white joints at ſeveral places thereon, and two ſuch-like leaves thereat up to the top, ſending forth branches at ſeveral joints alſo, all which bear, on ſeveral footſtalks, white flowers at the tops of them, conſiſting of five broad pointed leaves, every one cut in on the end unto the middle, making them ſeem to be two apiece, ſmelling ſomewhat ſweet, and each of them ſtanding in large, green, ſtriped, hairy, huſks, large and round below next to the ſtalk; the ſeed is ſmall and greyiſh in the hard heads that come up afterwards; the root is white, long, and ſpreading.

The red wild campion groweth in the ſame manner as the white, but its leaves are not ſo plainly ribbed, ſomewhat ſhorter, rounder, and more woolly in handling; the flowers are of the ſame ſize and form, but ſome are of a pale and others of a bright red colour, cut in at the ends more finely, which makes the leaves ſeem more in number than the other: the ſeed and the roots are alike, the roots of both ſorts abiding many years.

There are forty-five ſorts of campions more: thoſe of them which are of phyſical uſes have the like virtues with theſe above deſcribed, which are the two chief kinds.

Place. They grow commonly throughout this kingdom in fields, and by hedge-ſides and ditches.

Time. They flower in ſummer, ſome earlier than others, and ſome abiding longer than others.

Government and Virtues. They belong to Saturn; and it is found by experience that the decoction of the herb, either of the white or red, being drunk, doth ſtay inward bleedings, and applied outwardly it doth the like; alſo, being drunk, it helpeth to expel urine, being ſtopped, and gravel or ſtone in the reins or kidneys: two drachms of the ſeed, drunk in wine, will purge the body of choleric humours, and help thoſe that are ſtung by ſcorpions, or other venomous beaſts, and may be as effectual for the plague: it is of very good uſe in old ſores, ulcers, cankers, fiſtulas, and the like, to cleanſe and heal them, by conſuming the moiſt humours falling into them, and correcting the putrefaction of humours offending them.

## CARDUUS BENEDICTUS.

IT is called carduus benedictus, or bleſſed thiſtle, or holy thiſtle; which name was doubtleſs given to it on account of its excellent qualities.

I ſhall ſpare a labour in writing a deſcription of this, ſince almoſt every one may deſcribe them from his own knowledge.

Place. It groweth plentifully in gardens.

Time. They flower in Auguſt, and ſeed ſoon after.

Government and Virtues. It is an herb of Mars, and under the ſign Aries. Now, in treating on this herb, I ſhall give you a rational conception of all the reſt, and, if you pleaſe to view them throughout the book, you ſhall to your content find them true. It helps ſwimmings and giddineſs of the head, or the diſeaſe called vertigo, becauſe Aries is in the houſe of Mars. It is an excellent remedy againſt the yellow jaundice, and other infirmities of the gall, becauſe Mars governs choler. It ſtrengthens the attractive faculty in man, and clarifies the blood, becauſe it is ruled by Mars. The continual drinking the decoction of it helps red faces, tetters, and ringworms, becauſe Mars cauſeth them. It helps plague-ſores, boils, the itch, and bitings of mad dogs and venomous beaſts; all which infirmities are under Mars. Thus you ſee what it doth by ſympathy.

By antipathy to other planets, it cures the venereal diſeaſe; this by antipathy to Venus, who governs it. It ſtrengthens the memory, and cures deafneſs, by antipathy to Saturn, who hath his fall in Aries, which rules the head. It cures quartan agues, and other diſeaſes of melancholy and aduſt choler, by ſympathy to Saturn, Mars being exalted in Capricorn; alſo, it provokes urine, the ſtopping of which is uſually cauſed by Mars or the Moon. It is excellent for the head and the parts thereof; this herb being eaten, or the powder or juice drunk, keepeth a perſon from the head-ach and megrim, and alſo driveth it away. Being taken in meat or drink, it is good againſt dizzineſs and ſwimming of the head. It comforteth the brain, ſharpeneth the wit, and ſtrengtheneth the memory: it is a ſingular remedy againſt deafneſs, for it amendeth the thickneſs of the hearing, and provokes ſleep. The juice of it laid to the eyes quickeneth the ſight; alſo, the water in which the powder or herb dried is ſteeped, hath the ſame effect if the eyes be waſhed therewith; the herb eaten is good for the ſame purpoſe. The water or juice dropped into the eyes, cureth the redneſs, bloodſhot, and itching, of them. Some write that it ſtrengthens the teeth, they being waſhed and rubbed with a cloth dipped in the water or juice thereof. The powder ſtauncheth the blood that floweth out of the noſe, being applied to the place. It comforteth the ſtomach; the broth of the herb, otherwiſe called the decoction, drunk in wine, is good for an evil ſtomach; it helpeth a weak ſtomach, and cauſeth appetite to meat; alſo the wine, wherein it hath been boiled, doth cleanſe and mundify the infected ſtomach. The powder thereof, eaten with honey, or drunk in wine, doth ripen and digeſt cold phlegm, purgeth and bringeth up that which is in the breaſt, ſcouring the ſame of groſs humours, and cauſeth to breathe more eaſily. The herb, chewed in the mouth, healeth the ſtench of the breath. It helpeth the heart; the powder, being taken before a man is infected, preſerveth him from the peſtilence; and a drachm of it, or a walnut-ſhell full, taken immediately after he feeleth himſelf infected, expelleth the venom of the peſtilent infection from the heart, ſo that, if a man ſweat afterwards, he may be preſerved: the ſame effect hath the herb boiled in wine, or in the urine of a healthy man-child, and drunk; I mean the decoction or liquor from which the herb is ſtrained, after it hath been boiled therein; the ſame preparation is alſo good for the dropſy, the falling ſickneſs, and to break apoſthumes. The leaves, powder, juice, or water, of the herb, being drunk, and the patient well covered with clothes, ſweating three hours, expelleth all poiſons that have been taken in at the mouth, and other corruption or infection that may hurt and annoy the heart. It helpeth the liver, lungs, and other parts of the body; the herb boiled in wine, and drunk hot about a quarter of an hour before the fit, and the patient afterwards well covered in bed, driveth away the ague. The powder and water of this herb, drunk with wine, have the ſame effect. The juice, drunk with wine, is good againſt ſhortneſs of breath, and the diſeaſes of the lungs: it ſtrengtheneth the members, and is good againſt the achs of the body. The powder, eaten or drunk, is good againſt ſtitches in the ſide; it is alſo good for thoſe that begin to have the conſumption, called the phthyſic: the herb, eaten, doth ſtrengthen trembling and paralytic members: the powder, miniſtered in a clyſter, helpeth the cholic, and other diſeaſes of the guts; and the water drunk hath the ſame effect. The juice taken with wine, or the herb boiled in wine and drunk hot, breaketh the ſtone, and driveth out gravel; being ſodden in water, and the patient ſitting over it, ſo that the hot vapour may come unto the diſeaſed place, it helpeth againſt the ſame infirmity; after the like manner being uſed, it is good againſt the green-ſickneſs; alſo, it eaſeth the griping pains of the belly, openeth the ſtoppings of the members, and pierceth and cauſeth urine. The leaves boiled in wine, and drunk as aforeſaid, provoke ſweats, conſume evil blood, and ingender good; alſo, the wine or water, in which this herb has boiled, being drunk, conſumeth evil humours, and preſerveth good. It is excellent for one that is bruiſed with a fall or otherwiſe. The leaves, juice, broth, powder, and water, of the herb, are very good to heal the canker, and old, rotten, feſtered, ſores: the leaves bruiſed or pounded, and laid to, are good againſt burnings, hot ſwellings, carbuncles, and ſores that are hard to be cured, eſpecially for them of the peſtilence: they are likewiſe good to heal the bitings of venomous worms and ſerpents, or creeping beaſts. Finally, the down coming off the flowers thereof, when the ſeed is ripe, doth heal cuts and new wounds without pain*.

## CARROTS.

GARDEN carrots are ſo well known that they need no deſcription; but, becauſe they are of leſs phyſical uſe than the wild kind, (as indeed, almoſt in all herbs, the wild are moſt effectual in phyſic, as being more powerful in their operations than the garden kinds,) I ſhall therefore briefly deſcribe the wild carrot.

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* Thus much of carduus benedictus, gathered out of the Herbals of divers learned men, which although it may be ſufficient, yet I have thought good here to ſet down that which two ſtudious

Description. It groweth in a manner altogether like the tame, but that the leaves and ſtalks are ſomewhat whiter and rougher; the ſtalks bear large tufts of white flowers, with a deep purple ſpot in the middle, which are contracted together when

and ſkilful phyſicians, Mathiolus and Fuſchius, have written hereof in Latin; whoſe words, as perhaps they may bring ſome credit to that which is already written, ſo in them ſomething more may be learned, or at the leaſt ſomething is uttered for the better underſtanding of that aforeſaid. Their words are in Engliſh as followeth: Carduus benedictus is a plant of great virtue, eſpecially againſt the peſtilence, and alſo againſt deadly poiſons, as well taken inwardly as outwardly applied to the ſtingings and bitings of venomous beaſts; they alſo are healed with this herb that are troubled with a quartan or other agues, that come by a cold, and that by drinking of the decoction or diſtilled water, or a drachm of the powder: in like manner being drunk, it helpeth infants that are troubled with the falling ſickneſs. The decoction taken in wine doth mitigate the pains of the guts and reins, and other griefs of the belly; it provoketh ſweat, it killeth worms, and is good againſt other diſeaſes of the womb: the herb itſelf as well green as dried, both drunk and laid outwardly to the grief, doth heal ulcers; on ſuch extraordinary occaſions it is mingled with the drink made of guaiacum, wine, and water, for the French diſeaſe. Learned writers affirm that it taketh away the ſtoppings of the inward bowels; it provoketh urine, breaketh the ſtone, and helpeth thoſe that are ſtung of venomous beaſts. They ſay alſo that thoſe cannot be infected who take it in their meat or drink, before they come into the evil air, and that it helpeth them much that are already infected: moreover, moſt agree, that it is a remedy againſt the bitings of ſerpents. Finally, to conclude, late writers ſay, that it cureth the pains of the head, taketh away giddineſs, recovereth the memory, being taken in meat or drink. Alſo it helpeth feſtering ſores, eſpecially of the paps and teats, if the powder thereof be laid on them. By this we may in part underſtand, with how great virtue God hath indued, and I may ſay bleſſed, this herb. To ſum up all, it helpeth inwardly and outwardly; it ſtrengthens almoſt all the principal members of the body, as the brain, the heart, the ſtomach, the liver, the lungs, and kidneys. It is alſo a preſervative againſt all diſeaſes, for it provoketh ſweat, by which the body is purged of much corruption which breedeth diſeaſe. It expelleth the venom of infection, it conſumes ill blood, and all naughty humours, whereof diſeaſes are engendered. Therefore giving God thanks for his goodneſs which hath given this herb, and all other things, for the benefit of our health; it will in the next place be convenient to conſider how to make uſe of it in the application.

It is to be obſerved, that we may uſe this herb, and enjoy the virtues thereof, four ways: Firſt, in the green leaf. Secondly, in the powder. Thirdly, in the juice. And fourthly, in the diſtillation. The green leaf may be taken with bread and butter, as we uſe to take ſage and parſley in a morning for breakfaſt; and, if it be too bitter, it may be taken with honey inſtead of butter. It may be taken in pottage boiled among other herbs; or, being ſhred ſmall, it may be drunk with ale, beer, or wine. It is ſometimes given in beer with aqua compoſita, and that without harm, when the ſeed begins to ripen; ſo that the middle part being hollow and low, and the outward ſtalks riſing high, maketh the whole number to ſhew like a bird's neſt: the root is very ſmall, long, and hard, and quite unfit for meat, being ſomewhat ſharp and ſtrong.

Place. The wild kind grow in divers parts of this land, plentifully by the field ſides, and in untilled places.

Time. They flower and ſeed in the end of ſummer.

Government and Virtues. Wild carrots belong to Mercury, and therefore expel wind, and remove ſtitches in the ſides, provoke urine, and women's courſes, and help to expel and break the ſtone; the ſeed alſo of the ſame worketh the like effect, and is good for the dropſy, and thoſe whoſe bellies are ſwollen with wind; it helpeth the cholic, the ſtone in the kidneys, and the riſing of the mo-

when the ſtomach of the patient is weak, and he not troubled with any hot diſeaſe. The juice of it is outwardly applied; the leaf, powder, and water, of it, is received into the mouth. It may be taken in pottage alſo in the green leaf, or with wine, which if it be burned and drunk hot, it is the better. If you pleaſe, you may boil it with wine, and honey or ſugar to make it ſweet, and then drink it very warm. The powder may be taken with honey upon the point of a knife, or with bread and honey if you prefer it; or elſe it may be drunk with ale, beer, or wine. The diſtilled water may be drunk by itſelf alone, or elſe with white wine before meat, eſpecially if the ſtomach be weak and cold. The liquor or broth in which this herb is boiled may be made thus: Take a quart of running water, ſeethe it and ſcum it, then put into it a good handful of the herb, and let it boil until the better part be conſumed; then drink it with wine, or if you think fit with honey or ſugar, to make it the more palatable. Or you may make a potion thus: Take a good handful of the leaves, with a handful of raiſins of the ſun, waſhed and ſtoned, and ſome ſugarcandy and liquorice ſliced ſmall; boil them all together in a quart of water, ale, or wine: if it be bitter, it may be made ſweet as aforeſaid. It is alſo to be obſerved, that the powder and water of the herb are moſt to be regarded, and eſpecially the water: for they may be long preſerved, ſo that you may have them always in readineſs for uſe, when neither the green leaf nor juice can be had. The water, which only is free from bitterneſs, may be drunk by itſelf alone, for the ſtomach and taſte will bear it, being equally as palatable as roſe-water. If the ſeed be ſown as ſoon as it is ripe, you may have the herb both winter and ſummer, from the time that it beginneth to grow until the ſeed grow ripe again. Therefore I counſel all thoſe who have gardens, to nouriſh it, that they may have it always for their own uſe, and the uſe of their neighbours that ſtand in need of it. But perhaps ſome may aſk a queſtion of the time and quantity, which things are to be conſidered in taking of medicines. As touching the time, if it be taken for a preſervative, it is good to take it in the morning, or in the evening before going to bed, becauſe that is a convenient time to ſweat for one that feeleth himſelf not greatly diſeaſed. But, if a man take it to expel any ill humours, it is good to take it whenever the grief is felt in the body, and immediately to go to bed and ſweat.

ther, being taken in wine; boiled in wine and taken, it helpeth conception: the leaves, being applied with honey to running ſores or ulcers, do cleanſe them. I ſuppoſe the ſeed of them performs this better than the root; and, though Galen commended garden-carrots highly to break wind, yet experience teacheth that they breed it firſt; and we may thank nature for expelling it, not they. The ſeeds of them expel wind, and ſo mend what the root marreth.

## CARRAWAY.

Description. IT beareth divers ſtalks of fine cut leaves lying upon the ground, ſomewhat like the leaves of carrots, but not buſhing ſo thick, of a little quick taſte, from among which riſeth up a ſquare ſtalk not ſo high as the carrot, at whoſe joints are ſet the like leaves, but ſmaller and finer, and at the top ſmall open tufts or umbels of white flowers which turn into ſmall blackiſh ſeed, ſmaller than aniſeſeed, and of a quicker and hotter taſte: the root is whitiſh, ſmall, and long, ſomewhat like unto a parſnip, but with more wrinkled bark, and much leſs, of a little hot and quick taſte, and ſtronger than the parſnip; it abideth after ſeed-time.

Place. It is uſually ſown with us in gardens.

Time. They flower in June and July, and ſeed quickly after.

Government and Virtues. This is alſo a mercurial plant. Carraway-ſeed hath a moderate ſharp quality, whereby it expelleth wind, and provoketh urine, which alſo the herb doth: the root is better food than the parſnip, and is pleaſant and comfortable to the ſtomach, helping digeſtion: the ſeed is a remedy for all the cold griefs of the head and ſtomach, the bowels or mother, as alſo the wind in them, and helpeth to ſharpen the eye-ſight. The powder of the ſeed put into a poultice, taketh away black and blue ſpots of blows or bruiſes; the herb itſelf, or with ſome of the ſeed, bruiſed and fried, laid hot in a bag or double cloth to the lower parts of the belly, eaſeth the pains of the wind cholic: the roots of carraways, eaten as men eat parſnips, ſtrengthen the ſtomach of aged people exceedingly, and they need not make a whole meal of them neither; it is fit to be planted in every man's garden. Carraway-comfits, once only dipped in ſugar, and half a ſpoonful of them eaten in a morning faſting, and as many after each meal, is a moſt admirable remedy for ſuch as are troubled with wind.

## CELANDINE.

Description. THIS hath divers tender, round, whitiſh-green, ſtalks, with greater joints than ordinary in other herbs, as it were knees, very brittle and eaſy to break, from whence grows branches, with large, tender, long, leaves, divided into many parts, each of them cut in on the edges, ſet at the joints on both ſides of the branches, of a dark bluiſh green colour on the upper ſide, like columbines, and of a more pale bluiſh green underneath, full of a yellow ſap, when any part is broken, of a bitter taſte, and ſtrong ſcent; at the tops of the branches, which are much divided, grow gold-yellow flowers of four leaves each, after which come ſmall long pods, with blackiſh ſeed therein. Its root is ſomewhat great at the head, ſhooting forth divers long roots, and ſmall ſtrings, reddiſh on the outſide, and yellow within, and is full of a yellow ſap.

Place. It groweth in many places, by old walls, by the hedges and ways-ſides in untilled places; and being once planted in a garden, eſpecially in a ſhady place, it will remain there.

Time. They flower all the ſummer long, and the ſeed ripeneth in the mean time.

Government and Virtues. This is an herb of the Sun, and under the celeſtial Lion, and is one of the beſt cures for the eyes that is. All that know any thing of Aſtrology, know, as well as I can tell them, that the eyes are ſubject to the luminaries; let it then be gathered when the Sun is in Leo, and the Moon in Aries applying to his trine. Let Leo ariſe, then you may make it into an oil or ointment, which you pleaſe, to anoint ſore eyes with; I can prove it both from my own experience, and the experience of thoſe to whom I have taught it, that the moſt deſperate ſore eyes have been cured by this medicine only; then, I pray, is not this better than endangering the eyes by the art of the needle? for, if this do not abſolutely take away the film, it will ſo facilitate the work that it may be done without danger. The herb or root being boiled in white wine with a few aniſeſeeds therein, and drunk, openeth obſtructions of the liver and gall, helpeth the yellow-jaundice, and often uſing it helps the dropſy, the itch, and thoſe who have old ſores in their legs, or other parts of their body. The juice thereof taken faſting, is held to be of ſingular good uſe againſt the peſtilence; the diſtilled water with a little ſugar, and a little good treacle mixed therewith (the party upon taking it being laid down to ſweat a little), hath the ſame effect: the juice dropped into the eyes cleanſeth them from films and cloudineſs, which darken the ſight, but it is beſt to allay the ſharpneſs of the juice with a little breaſt milk; it is good in old, filthy, corroding, creeping, ulcers whereſoever, to ſtay the malignity of fretting and running, and to cauſe them to heal more ſpeedily; the juice often applied to tetters, ringworms, or other ſuch-like ſpreading cankers, will quickly heal them, and, rubbed often upon warts, will take them away. The herb with the roots bruiſed, and bathed with oil of camomile, and applied to the navel, taketh away the griping pains in the belly and bowels, and all the pains of the mother, and, applied to women's breaſts, ſtayeth the overmuch flowing of their courſes; the juice or decoction of the herb, gargled between the teeth that ach, eaſeth the pain, and the powder of the dried root laid upon an aching, hollow, or looſe, tooth, will cauſe it to fall out. The juice mixed with ſome powder of brimſtone, is not only good againſt the itch, but taketh away all diſcolourings of the ſkin whatſoever, and, if it chance that in a tender body it cauſeth any itching or inflammation, it is helped.

Another bad method have phyſicians in adminiſtering relief to the eye, which is worſe than the needle: that is, to eat away the film by corroding or gnawing medicines: this I abſolutely proteſt againſt, 1. Becauſe the tunicles of the eyes are very thin, and therefore ſoon eaten aſunder. 2. The *callus* or film that they would eat away is ſeldom of an equal thickneſs in every place, and by that means the tunicle may be eaten aſunder in one place before the film be conſumed in another, and ſo prove a readier way to extinguiſh the ſight than to reſtore it. It is called *chelidonium* from the Greek word χελιδων, which ſignifies a ſwallow, becauſe they ſay, that, if you prick out the eyes of young ſwallows when they are in the neſt, the old ones will recover their eyes again with this herb. This I am confident, for I have tried it, that, if you mar the very apple of their eyes with a needle, they will recover them again; but whether with this herb or not, I do not know.

Alſo I have read, and it ſeems to me ſomewhat probable, that the herb being gathered, as I ſhewed before, and the elements ſeparated from it by the art of the alchymiſt, and, after they are drawn apart, rectified, the earthy quality ſtill in rectifying them added to the *terra damnata*, as alchymiſts call it, or, as ſome philoſophers term it, *terra ſacratiſſima*; the elements ſo rectified are ſufficient for the cure of all diſeaſes, the humour offending being known, and the contrary element given. It is an experiment worth the trying, and can do no harm.

## The Smaller CELANDINE.

IT is uſually known by the name of pilewort, and fogwort, and I wonder much on what account the name of celandine was given it, which reſembles it neither in nature or form. It acquired the name of pilewort from its virtues; and it being no matter where I ſet it down, ſo I do not quite omit it, I ſhall proceed to the deſcription.

Description. This celandine, or pilewort, doth ſpread many round pale-green leaves, ſet on weak and trailing branches, which lie upon the ground, and are flat, ſmooth, and ſomewhat ſhining, and in ſome places, though ſeldom, marked with black ſpots, each ſtanding on a long footſtalk, among which riſe ſmall yellow flowers, conſiſting of nine or ten ſmall narrow leaves, upon ſlender footſtalks, very like a crowfoot, whereunto the ſeed alſo is not unlike, being many ſmall ones ſet together upon a head: the root is compoſed of many ſmall kernels like grains of corn, ſome twice as long as others, of a whitiſh colour, with ſome fibres at the end of them.

TIME. It groweth for the moſt part in the moiſt corners of fields, and places near water-ſides; yet will abide in drier grounds, if they are but a little ſhadowed.

PLACE. It flowereth about March or April, and is quite gone in May, ſo that it cannot be found until it ſprings again.

GOVERNMENT AND VIRTUES. It is under the dominion of Mars; and behold here another verification of that learning of the ancients, viz. that the virtue of an herb may be known by its ſignature, as plainly appears in this; for, if you dig up the root of it, you ſhall ſee the perfect image of that diſeaſe which is commonly called the piles. It is certain from good experience, that the decoction of the leaves and roots doth wonderfully help the piles and hæmorrhoids, as alſo kernels by the ears and throat, called the king's-evil, or any other hard wens or tumours. Pilewort made into an oil, ointment, or plaſter, readily cures both the piles, hæmorrhoids, and the king's-evil; the very herb borne about one's body, next to the ſkin, helps in ſuch diſeaſes, though it does not touch the place grieved. Let poor people make much of this for theſe uſes, for with this I cured my own daughter of the king's-evil, broke the ſore, drew out a quarter of a pint of corrupt matter, and in one week made a complete cure without a ſcar.

## THE ORDINARY SMALLER CENTAURY.

DESCRIPTION. THIS groweth up moſt uſually with but one round and ſomewhat creſted ſtalk, about a foot high, or better, branching forth at the top into many ſprigs, and ſome alſo from the joints of the ſtalks below; the flowers, that ſtand at the tops as it were in an umbel or tuft, are of a pale red, tending to a carnation colour, conſiſting of five, ſometimes ſix, ſmall leaves, very like thoſe of St. John's wort, opening themſelves in the day-time, and cloſing at night; after which cometh the ſeed in little ſhort huſks, in form like wheat corns: the leaves are ſmall and ſomewhat round: the root is ſmall and hard, periſhing every year. The whole plant is of an exceeding bitter taſte.

There is another ſort of centaury in all things like the former, ſave only that it beareth white flowers.

PLACE. They grow generally in fields, paſtures, and woods; but that with the white flowers not ſo frequently as the other.

TIME. They flower in July, or thereabouts, and ſeed within a month after.

GOVERNMENT AND VIRTUES. They are all under the dominion of the Sun, as appears in that their flowers open and ſhut as the Sun either ſheweth or hideth his face. This herb, boiled and drunk, purgeth choleric and groſs humours, and helpeth the ſciatica; it openeth obſtructions of the liver, gall, and ſpleen, helping the jaundice, and eaſing the pains of the ſides, and hardneſs of the ſpleen, if uſed outwardly; it is given with good effect in agues, it helpeth thoſe that have the dropſy, or the green-ſickneſs, being much uſed in powder by the Italians for that purpoſe: and it killeth the worms in the belly, as found by experience. The decoction thereof, viz. the tops of the ſtalks with the leaves and flowers, is good againſt the cholic, and to bring down women's courſes; it helpeth to expel the dead birth, and eaſeth pains of the mother, and is very effectual in all old pains of the joints, as the gout, cramps, or convulſions. A drachm of the powder thereof taken in wine, is a wonderful good help againſt the biting and poiſon of an adder; the juice of the herb with a little honey put to it, is good to clear the eyes from dimneſs, miſts, and clouds, that offend and hinder the ſight. It is very good both for green and freſh wounds, as alſo for old ulcers and ſores, to cloſe up the one and cleanſe the other, and to perfectly cure them both, although they are hollow or fiſtulous; eſpecially if the green herb be bruiſed, and laid thereon: the decoction thereof, dropped into the ears, frees them from worms, cleanſeth the foul ulcers and ſpreading ſcabs of the head, and taketh away all freckles, ſpots, and marks, of the ſkin, being waſhed therewith; the herb is ſo ſafe, you cannot fail in the uſing of it. Take it inwardly only for inward diſeaſes, and apply it outwardly for outward complaints: it is very wholeſome, but not pleaſant to the taſte.

There is beſides theſe another ſmall centaury, which beareth a yellow flower; in all other reſpects it is like the former, ſave that the leaves are bigger, and of a darker green, and the ſtalk paſſeth through the midſt of them, as it does in the herb thoroughwax. They are all of them, as I ſaid before, under the dominion of the Sun; yet this, if you obſerve it, you ſhall find an excellent truth. In diſeaſes of blood, uſe the red centaury; if of choler, uſe the yellow; but, if of phlegm or water, you will find the white beſt.

## CHERRY-TREE.

I SUPPOSE there are few but know this tree, if only for its fruit's ſake, and therefore I ſhall decline writing a deſcription.

Place. For the place of its growth, it is afforded room in every orchard.

Government and Virtues. It is a tree of Venus. Cherries, as they are of different taſtes, ſo they are of divers qualities; the ſweet paſs through the ſtomach and belly more ſpeedily, but are of little nouriſhment: the tart or ſour are more pleaſing to a hot ſtomach, procuring appetite to meat, and help to cut tough phlegm and groſs humours; but, when theſe are dried, they are more binding than when they are freſh, being cooling in hot diſeaſes, and welcome to the ſtomach; it alſo provokes urine. The gum of the cherry-tree, diſſolved in wine, is good for a cough, and hoarſeneſs of the throat; it mendeth the colour in the face, ſharpeneth the eye-ſight, provoketh the appetite, and helpeth to break and expel the ſtone. Black cherries bruiſed with the ſtones, and diſtilled, the water thereof is much uſed to break the ſtone, expel gravel, and break wind.

## WINTER CHERRIES.

Description. THE winter cherry hath a running or creeping root in the ground, generally of the ſize of one's little finger, ſhooting forth at ſeveral joints, in ſeveral places, whereby it quickly ſpreadeth over a great compaſs of ground; the ſtalk riſeth not above a yard high, whereon are ſet many broad and long green leaves, ſomewhat like nightſhade, but larger; at the joints whereof came forth whitiſh flowers made of five leaves each, which after turn into green berries, encloſed with a thin ſkin, which change to reddiſh when they grow ripe, the berry likewiſe being reddiſh and as large as a cherry, wherein are contained many flat yellowiſh ſeeds, lying within the pulp, which, being gathered and ſtrung up, are kept all the year, to be uſed upon occaſion.

Place. They do not grow naturally in this land, but are cheriſhed in gardens for their virtues.

Time. They flower not until the middle or latter end of July, and the fruit is ripe about the end of Auguſt, or beginning of September.

Government and Virtues. This is alſo a plant of Venus. They are of great uſe in phyſic: the leaves being cooling, may be uſed in inflammations; but are not opening as the berries and fruit are, which, by drawing down the urine, provoke it to be voided plentifully when it is ſtopped, or grown hot, ſharp, and painful, in the paſſage; it is good alſo to expel the ſtone and gravel out of the reins, kidneys, and bladder, helping to diſſolve the ſtone, and voiding it by grit or gravel ſent forth in the urine; it alſo helpeth much to cleanſe inward impoſthumes or ulcers in the reins or bladder, or in thoſe that void a bloody or foul urine: the diſtilled water of the fruit, or the leaves together with them, or the berries green or dry, diſtilled with a little milk, and drunk morning and evening with a little ſugar, is effectual to all the purpoſes before ſpecified, and eſpecially againſt the heat and ſharpneſs of the urine. I ſhall only mention one way, amongſt many others, which might be uſed for ordering the berries to be helpful for the urine and ſtone, which is thus:

Take three or four good handfuls of the berries, either green or freſh, or dried, and, having bruiſed them, put them into ſo many gallons of beer or ale, when it is newly tunned up; this drink, taken daily, hath been found to do much good to many, both to eaſe the pains, expel urine and the ſtone, and to cauſe the ſtone not to ingender. The decoction of the berries in wine and water is the moſt uſual way, but the powder of them taken in drink is the moſt effectual.

## CHERVIL.

IT is called cerefolium, mirrhis, and mirtha, chervil, ſweet chervil, and ſweet cicely.

Description. The garden chervil doth at firſt reſemble parſley, but, after it is more grown, the leaves are much cut and jagged, reſembling hemlock, being a little hairy, and of a whitiſh-green colour, ſometimes turning reddiſh in the ſummer, as do the ſtalks alſo; it riſeth little more than half a foot high, bearing white flowers in ſpiked tufts, which turn into long and round ſeeds, pointed at the ends, and blackiſh when they are ripe, of a ſweet taſte, but no ſmell, though the herb itſelf ſmelleth reaſonably well: the root is ſmall and long, and periſheth every year, and muſt be ſown in the ſpring for ſeed, and after July for autumn ſallad.

The wild chervil groweth two or three feet high, with yellow ſtalks and joints ſet with broader and more hairy leaves, divided into ſundry parts, nicked about the edges, and of a dark-green colour, which likewiſe groweth reddiſh with the ſtalks; at the tops whereof ſtand ſmall white tufts of flowers, and afterwards ſmaller and longer ſeed: the root is white, hard, and endureth long. This hath little or no ſcent.

Place. The firſt is ſown in gardens for a ſallad-herb; the ſecond groweth wild in the meadows of this land, and by hedge-ſides, and on heaths.

Time. They flower and ſeed early, and thereupon are ſown again at the end of the ſummer.

Government and Virtues. The garden chervil, being eaten, doth moderately warm the ſtomach, and is a certain remedy to diſſolve congealed or clotted blood in the body, or that which is clotted by bruiſes, falls, &c. The juice or diſtilled water thereof being drunk, and the bruiſed leaves laid to the place; being taken either meat or drink, it is held good to provoke urine, or expel the ſtone in the kidneys, to bring down women's courſes, and to help the pleuriſy and prickings of the ſide. The wild chervil, bruiſed and applied, diſſolveth ſwellings in any part of the body, and taketh away ſpots and marks of congealed blood, by bruiſes or blows, in a ſhort time.

## SWEET CHERVIL.

CALLED by ſome ſweet cicely.

Description. It groweth very much like the greater hemlock, having large ſpread leaves, cut into divers parts, but of a freſher green colour than hemlock, taſting as ſweet as aniſeſeed; the ſtalk riſeth up a yard high, or more, being creſted or hollow, having the leaves at the joints, but leſs, and at the tops of the branched ſtalks, umbels or tufts of white flowers; after which comes large and long creſted, black, ſhining, ſeed, pointed at both ends, taſting quick, yet ſweet and pleaſant: the root is great and white, growing deep in the ground, and ſpreading ſundry long branches therein, in taſte and ſmell ſtronger than the leaves or ſeed, and continue many years.

Place. It groweth in gardens.

Government and Virtues. Theſe are all three of them of the nature of Jupiter, and under his dominion. This whole plant, beſides its pleaſantneſs in ſallads, hath alſo its phyſical virtues; the root boiled and eaten with oil and vinegar, or without oil, doth much pleaſe and warm an old and cold ſtomach, oppreſſed with wind or phlegm, or thoſe that have the phthyſic or conſumption of the lungs. The ſame, drunk with wine, is a preſervative from the plague; it provoketh women's courſes, and expelleth the after-birth, procureth an appetite to meat, and expelleth wind: the juice is good to heal the ulcers of the head and face; the candied roots hereof are held as effectual as angelica to preſerve from infection in the time of a plague, and to warm and comfort a cold weak ſtomach. It is ſo harmleſs that you cannot make uſe of it amiſs.

## CHESNUT-TREE.

TO deſcribe a tree ſo commonly known, were as needleſs as to tell a man he has a mouth; therefore take the government and virtues of it thus:

The tree is abſolutely under the dominion of Jupiter, and therefore the fruit muſt needs breed good blood, and yield commendable nouriſhment to the body; yet, if eaten overmuch, they make the blood thick, procure the head-ach, and bind the body; the inner ſkin that covereth the nut, is of ſo binding a quality, that a ſcruple of it being taken by a man, or ten grains by a child, ſoon ſtops any flux whatſoever: the whole nut being dried and beaten into powder, and a drachm taken at a time, is a good remedy to ſtop the terms in women. If you dry cheſnuts, and beat the kernels into powder, both the barks being taken away, and make it up into an electuary with honey, you have an admirable remedy for the cough and ſpitting blood.

# EARTH CHESNUTS.

THEY are called earth nuts, earth cheſnuts, ground nuts, cipper nuts, and in Suſſex they are called pig nuts. A deſcription of them were needleſs, for every child knows them.

Government and Virtues. They are ſomething hot and dry in quality, under the dominion of Venus; they provoke luſt exceedingly, and ſtir up to thoſe ſports ſhe is miſtreſs of; the ſeed is excellent good to provoke urine, and ſo alſo is the root, but doth not perform it ſo forceably as the ſeed. The root being dried and beaten into powder, and the powder made into an electuary, is as ſingular a remedy for ſpitting and piſſing blood as the former cheſnuts are for coughs.

# CHICKWEED.

IT is generally known to moſt people, I ſhall not therefore trouble you with the deſcription thereof, nor myſelf with ſetting forth the ſeveral kinds, ſince there are but two or three worth notice for their uſefulneſs.

Place. Theſe are uſually found in moiſt and watery places, by wood-ſides, and elſewhere.

Time. They flower about June, and their ſeed is ripe in July.

Government and Virtues. It is a fine, ſoft, pleaſing, herb, under the dominion of the Moon. It is found to be as effectual as purſlain to all the purpoſes whereunto it ſerveth, except for meat only. The herb bruiſed, or the juice applied, with cloths or ſponges dipped therein, to the region of the liver, and as they dry to have freſh applied, doth wonderfully temper the heat of the liver, and is effectual for all impoſthumes and ſwellings whatſoever; for all redneſs in the face, wheals, puſhes, itch, and ſcabs, the juice being either ſimply uſed, or boiled in hog's greaſe; the ſame helpeth cramps, convulſions, and palſies: the juice or diſtilled water is of good uſe for all heat and redneſs in the eyes, to drop ſome of it into them; as alſo into the ears to eaſe the pains in them, and is of good effect to eaſe the pains and heat and ſharpneſs of blood in the piles, and all pains of the body in general that proceed from heat; it is uſed alſo in hot and virulent ulcers and ſores in the privy parts of men and women, or on the legs, or elſewhere. The leaves boiled with marſhmallows, and made into a poultice with fenugreek and linſeed, applied to ſwellings or impoſthumes, ripeneth and breaketh them, or aſſuageth the ſwellings, and eaſeth the pains; it helpeth the ſinews when they are ſhrunk by cramps or otherwiſe, and extends and makes them pliable again, by uſing the following method, viz. Boil an handful of chickweed, and a handful of dried red-roſe leaves, but not diſtilled, in a quart of muſcadine until a fourth part be conſumed; then put to them a pint of oil of trotters, or ſheep's feet; let them boil a good while, ſtill ſtirring them well, which being ſtrained anoint the grieved part therewith, warm againſt the fire, rubbing it well with your hand, and bind alſo ſome of the herb, if you chooſe, to the place, and with God's bleſſing it will help in three times dreſſing.

## CHICH PEASE.

IT is alſo called by ſome cicers.

Description. The garden ſorts, whether red, black, or white, bring forth ſtalks a yard long, whereon do grow many ſmall and almoſt round leaves, dented about the edges, ſet on both ſides of a middle rib; at the joints come forth one or two flowers upon ſharp footſtalks, peaſe-faſhion, either whitiſh, or purpliſh red, lighter or deeper, according as the peaſe that follow will be, which are contained in ſmall, thick, and ſhort, pods, wherein lie one or two peaſe, though uſually more, a little pointed at the lower end, and almoſt round at the head, yet a little cornered or ſharp. The root is ſmall, and periſheth yearly.

Place and Time. They are ſown in gardens, or in fields, as peaſe, being ſown later than peaſe, and gathered at the ſame time with them, or preſently after.

Government and Virtues. They are both under the dominion of Venus. They are no leſs windy than beans, but nouriſh more; they provoke urine, and are thought to increaſe ſperm; they have a cleanſing faculty, whereby they break the ſtone in the kidneys. To drink the cream of them being boiled in water, is the beſt way. It moveth the belly downwards, provoketh women's courſes, and urine, and increaſes both milk and ſeed. One ounce of cicers, two ounces of French barley, and a ſmall handful of marſh-mallow roots, clean waſhed and cut, being boiled in the broth of a chicken, and four ounces taken in the morning, faſting two hours after, is a good medicine for a pain in the ſides. The white cicers are uſed more for meat than medicine, yet they have the ſame effect, and are thought more powerful to increaſe milk and ſeed.

The wild cicers are ſo much more powerful than the garden kinds, by how much they exceed them in heat and dryneſs, whereby they are more effectual in opening obſtructions, breaking the ſtone, and having all the properties of cutting, opening, digeſting, and diſſolving, more ſpeedily and certainly than the former.

## CINQUEFOIL.

IT is called in ſome countries, five-fingered graſs, or five-leaved graſs.

Description. This ſpreadeth and creepeth far upon the ground, with long ſlender ſtrings like ſtrawberries, which take root again and ſhoot forth many leaves made of five parts, and ſometimes of ſeven, dented about the edges and ſomewhat hard. The ſtalks are ſlender, leaning downwards, and bear many ſmall yellow flowers thereon, with ſome yellow threads in the middle, ſtanding about a ſmooth green head; which when it is ripe is a little rough, and containeth ſmall browniſh ſeed. The root is of a blackiſh brown colour, ſeldom ſo big as one's little finger, but growing long with ſome threads thereat; and by the ſmall ſtrings it quickly ſpreadeth over the ground.

Place. It groweth by wood ſides, hedge ſides, the pathways in fields, and in the borders and corners of them, almoſt in every part of this kingdom.

Time. It flowereth in ſummer, ſome ſooner, ſome later.

Government and Virtues. This is an herb of Jupiter, and therefore ſtrengthens the parts of the body that he rules; let Jupiter be angular and ſtrong when it is gathered, and if you give but a ſcruple, which is only twenty grains, of it at a time, either in white wine, or white-wine vinegar, you ſhall ſeldom miſs the cure of an ague, be it what ague ſoever, in three fits, as I have often proved to the admiration both of myſelf and others. It is an eſpecial herb uſed in all inflammations and fevers, whether infectious or peſtilential; or among other herbs to cool and temper the blood and humours in the body: as alſo for all lotions, gargles, injections, and the like, for ſore mouths, ulcers, cankers, fiſtulas, and other corrupt, foul, or running, ſores. The juice hereof drunk about four ounces at a time, for certain days together, cureth the quinſey and the yellow jaundice; and, taken for thirty days together, cureth the falling ſickneſs. The roots boiled in milk, and drunk, is a moſt effectual remedy for all fluxes in man or woman, whether the whites or reds, as alſo the bloody flux. The roots boiled in vinegar, and the decoction thereof held in the mouth, eaſeth the pains of the tooth-ach. The juice or decoction taken with a little honey, helpeth the hoarſeneſs of the throat, and is very good for the cough of the lungs. The diſtilled water both of the root and leaves is alſo effectual to all the purpoſes aforeſaid; and if the hands are often waſhed therein, and ſuffered at every time to dry in of itſelf without wiping, it will in a ſhort time help the palſy or ſhaking in them. The root boiled in vinegar, helpeth all knots, kernels, hard ſwellings, and lumps, growing in any part of the fleſh, being thereto applied; as alſo all inflammations, St. Anthony's fire, alſo all impoſthumes, and painful ſores, with heat and putrefaction, the ſhingles, and all other ſorts of running and foul ſcabs, ſores, and the itch. The ſame alſo boiled in wine, and applied to any painful or aching joints, or the gout in the hands or feet, or the hip-gout, called the ſciatica; and the decoction thereof, drunk at the ſame time, doth cure them, and eaſeth violent pains in the bowels. The roots are likewiſe effectual to help ruptures or burſtings, being uſed with other things available to that purpoſe, taken either inwardly or outwardly, or both: as alſo for bruiſes, or hurts, by blows, falls, or the like, and to ſtay the bleeding of wounds in any part either inward or outward.

Some hold that one leaf cures a quotidian, three a tertian, and four a quartan, ague; but, with reſpect to the number of leaves, it is a matter of no conſequence, or whether it is given in powder or decoction: if Jupiter were ſtrong and the Moon applying to him, or his good aſpect at the gathering of it, I never knew it miſs the deſired effects.

## CIVES.

THEY are alſo called ruſh-leeks, chives, civet, and ſweth.

Temperature and Virtues. I confeſs I had not added theſe had it not been for a letter I received of a country gentleman, who certified me that amongſt other herbs I had left theſe out; they are indeed a kind of leeks, hot and dry in the fourth degree as they are, and alſo under the dominion of Mars; if they are eaten raw, (I do not mean raw oppoſite to roaſted or boiled, but raw oppoſite to a chymical preparation,) they ſend up very hurtful vapours to the brain, cauſing troubleſome ſleep, and ſpoiling the eye-ſight; yet of them prepared by the art of the alchymiſt may be made an excellent remedy for ſtoppage of urine.

## CLARY,

OR, more properly, clear-eye.

Description. Our ordinary garden clary hath four-ſquare ſtalks, with broad, rough, wrinkled, whitiſh, or hairy green, leaves, ſomewhat evenly cut on the edges, and of a ſtrong ſweet ſcent, growing ſome near the ground, and ſome by couples upon ſtalks: the flowers grow at certain diſtances with two ſmall leaves at the joints under them, ſomewhat like unto the flowers of ſage, but ſmaller, and of a whitiſh blue colour: the ſeed is browniſh and ſomewhat flat, or not ſo round as the wild: the roots are blackiſh, and do not ſpread far; it periſheth after the ſeeding time. It is uſually ſown, for it ſeldom riſeth of its own ſowing.

Place. This groweth in gardens.

Time. It flowereth in June and July, ſome a little later than others, and their ſeed is ripe in Auguſt, or thereabout.

Government and Virtues. It is under the dominion of the Moon. The ſeed is uſed to be put into the eyes to clear them from moats, or other ſuch-like things gotten within the lids to offend them, as alſo to cleanſe them from white or red ſpots in them. The mucilage of the ſeed made with water, and applied to tumours or ſwellings, diſperſeth and taketh them away; as alſo draweth forth ſplinters, thorns, or other things, gotten into the fleſh. The leaves uſed with vinegar, either by itſelf or with honey, do help hot inflammations, as alſo biles, fellons, and the hot inflammations that are gathered by their pains, if it be applied before they are grown too great. The powder of the dried root put into the noſe provoketh ſneezing, and thereby purgeth the head and brain of much rheum and corruption. The ſeed or leaves, taken in wine, provoketh to venery. It is of much uſe both for men and women that have weak backs, to help to ſtrengthen the reins, uſed either by itſelf or with other herbs conducing to the ſame effect, and in tanſies often. The freſh leaves dipped in a batter of flour, eggs, and a little milk, and fried in butter, and ſerved to the table, are not unpleaſant to any, but exceeding profitable for thoſe that are troubled with weak backs, and the effects thereof. The juice of the herb put into ale or beer, and drunk, bringeth down women's courſes, and expelleth the after-birth.

It is an uſual courſe with many men when they have gotten the running of the reins, or women the whites, they have immediate recourſe to the clary buſh, which having fried in butter they eagerly eat in expectation of inſtant relief, but to their great diſappointment often find themſelves worſe than before they had tried this expedient. We will grant that clary ſtrengthens the back; but this we deny, that the cauſe of the running of the reins in men, or the whites in women, lies in the back, (though the back may be ſometimes weakened by them;) conſequently the application of this medicine is frequently improper.

## WILD CLARY.

WILD CLARY is often, though I think imprudently, called Chriſt's eye, becauſe it cureth the diſeaſes of the eyes.

Description. It is like the other clary, but leſs, with many ſtalks about a foot and a half high; the ſtalks are ſquare and ſomewhat hairy; the flowers of a bluiſh colour. He that knows the common clary cannot be ignorant of this.

Place. It grows commonly in this kingdom, in barren places; you may find it plentifully if you look in the fields near Gray's Inn, and the fields near Chelſea.

Time. They flower from the beginning of June to the latter end of Auguſt.

Government and Virtues. It is ſomething hotter and drier than the garden clary, yet nevertheleſs under the dominion of the Moon, as well as that the ſeeds of it being beaten to powder and drunk in wine is an admirable help to provoke luſt; a decoction of the leaves being drunk warms the ſtomach, and it is a wonder if it ſhould not, the ſtomach being under Cancer the houſe of the Moon. It helps digeſtion, ſcatters congealed blood in any part of the body, and helps dimneſs of ſight; the diſtilled water thereof cleanſeth the eyes of redneſs, wateriſhneſs, and heat; it is a gallant remedy for dimneſs of ſight, to take one of the ſeeds of it and put into the eye, and there let it remain till it drops out of itſelf, the pain will be nothing to ſpeak of: it will cleanſe the eyes of all filthy and putrid matters, and, in often repeating of it, will take off a film which covereth the ſight; a handſomer, ſafer, and eaſier, remedy a great deal than to tear it off with a needle.

## CLEAVERS.

IT is alſo called aparine, gooſe-ſhare, and gooſe-graſs.

Description. The common cleavers hath divers very rough ſquare ſtalks, not ſo big as the tag of a point, but riſing up to be two or three yards high ſometimes, if it meets with any tall buſhes or trees whereon it may climb, yet without any claſpers; or elſe much lower, and lying upon the ground full of joints, and at every one of them ſhooteth forth a branch, beſides the leaves thereat, which are uſually ſix, ſet in a round compaſs like a ſtar, or the rowel of a ſpur: from between the leaves of the joints towards the tops of the branches, come forth very ſmall white flowers at every end upon ſmall thready footſtalks, which after they are fallen, there do ſhew two ſmall, round, rough, ſeeds, which, when they are ripe, grow hard and whitiſh, having a little hole on the ſide ſomewhat like unto a navel. Both ſtalks, leaves, and ſeeds, are ſo rough, that they will cleave unto any thing that ſhall touch them. Its root is ſmall and thready, ſpreading much in the ground, but dieth every year.

Place. It groweth by the hedge and ditch ſides, in many places of this land, and is ſo troubleſome an inhabitant in gardens, that it climbeth upon, and is ready to choak, whatever grows near it.

Time. It flowereth in June and July, and the ſeed is ripe, and falleth again, about the end of July or Auguſt, from whence it ſpringeth up again, and not from the old roots.

Government and Virtues. It is under the dominion of the Moon. The juice of the herb, and the ſeed taken in wine, helpeth thoſe that are bitten with an adder, by preſerving the heart from the venom. It is familiarly taken in broth to keep thoſe lean and lank that are apt to grow fat. The diſtilled water drunk twice a-day helpeth the yellow jaundice, and the decoction of the herb by experience is found to do the ſame, and ſtayeth the laſk and bloody fluxes. The juice of the leaves, or the leaves a little bruiſed, and applied to any bleeding wound, ſtayeth the bleeding; the juice is alſo very good to cloſe up the lips of green wounds; and the powder of the dried herb ſtrewed thereupon doth the ſame, and likewiſe helpeth old ulcers. Being boiled with hog's greaſe, it healeth all ſorts of hard ſwellings or kernels in the throat, being anointed therewith. The juice dropped into the ears taketh away the pains from them. It is a good remedy in the ſpring eaten, being firſt chopped ſmall and boiled well, in water gruel, to cleanſe the blood and ſtrengthen the liver, thereby keeping the body in health, and fitting it for that change of ſeaſon that is coming.

## CLOWN's WOUNDWORT.

Description. IT groweth up ſometimes to three or four feet high, but uſually about two feet, with ſquare, green, rough, ſtalks, but ſlender, jointed ſomewhat far aſunder, and two very long, and ſomewhat narrow, dark-green leaves, bluntly dented about the edges, and ending in a long point. The flowers ſtand toward the tops, compaſſing the ſtalks at the joints with the leaves, and end likewiſe in a ſpiked top, having long and much open gaping hoods, of a purpliſh red colour with whitiſh ſpots in them, ſtanding in ſomewhat rough huſks, wherein afterwards ſtand blackiſh round ſeeds. The root is compoſed of many long ſtrings, with ſome tuberous long knobs growing among them, of a pale yellowiſh or whitiſh colour, yet at at ſome times of the year theſe knobby roots in many places are not ſeen in the plant: the whole plant ſmelleth ſomewhat ſtrongly.

Place. It groweth in ſundry counties of this land, both north and weſt, and frequently by path-ſides in the fields near about London, and within three or four miles diſtance about it, yet uſually grows in or near ditches.

Time. It flowereth in June and July, and the ſeed is ripe ſoon after.

Government and Virtues. It is under the dominion of the planet Saturn. It is ſingularly effectual in all freſh and green wounds, and therefore beareth not this name for nought. And is very available in ſtaunching of blood, and to dry up the fluxes of humours in old fretting ulcers, cancers, &c. that hinder the healing of them. A ſyrup made of the juice of it is inferior to none for inward wounds, ruptures of veins, bloody flux, veſſels broken, ſpitting, piſſing, or vomiting, blood: ruptures are excellently and ſpeedily, even to admiration, cured by taking now and then a little of the ſyrup, and applying an ointment or plaſter of the herb to the place; and alſo if any vein be ſwelled, or muſcle cut, apply a plaſter of this herb to it, and, if you add a little comfrey to it, it will not do amiſs. I aſſure you this herb deſerves commendation, though it have gotten but a clowniſh name; and whoever reads this, if he try it as I have done, will commend it as well as me.--- It is of an earthy nature.

## COCK's HEAD.

OTHERWISE called red fithcling, or medick fetch.

Description. This hath divers weak but rough ſtalks, half a yard long, leaning downwards, beſet with winged leaves, longer and more pointed than thoſe of lentils, and whitiſh underneath; from the tops of thoſe ſtalks ariſe up other ſlender ſtalks, naked without leaves unto the tops, where there grow many ſmall flowers in manner of a ſpike, of a pale-reddiſh colour, with ſome blueneſs among them; after which riſe up in their places, round, rough, and ſomewhat flat, heads. The root is tough and ſomewhat woody, yet liveth and ſhooteth afreſh every year.

Place. It groweth under hedges, and ſometimes in the open fields, in divers places of this land.

Time. They flower all the months of July and Auguſt, and the ſeed ripeneth in the mean while.

Government and Virtues. It is under the dominion of Venus. It hath power to ratify and digeſt, and therefore the green leaves bruiſed and laid as a plaſter, diſperſe knots, nodes, or kernels, in the fleſh: and, if when it is dry it be taken in wine, it helpeth the ſtranguary; and, being anointed with oil, it provoketh ſweat. It is a ſingular food for cattle, to cauſe them to give ſtore of milk; and why then may it not do the like being boiled in the ordinary drink of nurſes?

## COLUMBINES.

THESE are ſo well known, growing in almoſt every garden, that I think I may ſave the expence of time in writing a deſcription of them.

Time. They flower in May, and abide not for the moſt part when June is paſt, perfecting their ſeed in the mean time.

Government and Virtues. It is alſo an herb of Venus. The leaves of columbines are commonly uſed in lotions with good ſucceſs for ſore mouths and throats; Tragus ſaith, that a drachm of the ſeed taken in wine, with a little ſaffron, openeth obſtructions of the liver, and is good for the yellow jaundice, if the party after the taking thereof be laid to ſweat well in his bed: the ſeed alſo taken in wine cauſeth a ſpeedy delivery of women in child-birth; if one draught ſuffice not, let her drink a ſecond, and it will be effectual. The Spaniards uſed to eat a piece of the root hereof faſting, many days together, to help them when troubled with the ſtone in the reins or kidneys.

## COLTSFOOT.

CALLED alſo cough-wort, ſeal's foot, horſe hoof, and bull's foot.

Description. This ſhooteth up a ſlender ſtalk with ſmall yellowiſh flowers, ſomewhat early, which fall away quickly; after they are paſt come up ſomewhat round leaves, ſometimes dented a little about the edges, much leſs, thicker, and greener, than thoſe of butter-bur, with a little down or freeze over the green leaf on the upper ſide, which may be rubbed away, and whitiſh or mealy underneath. The root is ſmall and white, ſpreading much under ground, ſo that where it taketh it will hardly be driven away again, if any little piece be abiding therein; and from thence ſpring freſh leaves.

Place. It groweth as well in wet grounds as in drier places.

Time. It flowereth in the end of February, the leaves beginning to appear in March.

Government and Virtues. The plant is under Venus. The freſh leaves, or juice, or a ſyrup made thereof, is good for a hot dry cough, for wheezings and ſhortneſs of breath: the dry leaves are beſt for thoſe that have thin rheums, and diſtillations upon their lungs, cauſing a cough, for which alſo the dried leaves taken as tobacco, or the root, is very good. The diſtilled water hereof ſimply, or with elderflowers and nightſhade, is a ſingular remedy againſt all hot agues, to drink two ounces at a time, and apply cloths wet therein to the head and ſtomach; which alſo doth much good being applied to any hot ſwellings or inflammations; it helpeth St. Anthony's fire and burnings, and is ſingular good to take away wheals and ſmall puſhes that ariſe through heat; as alſo the burning heat of the piles, or privy parts, cloths wet therein being thereunto applied.

## COMFREY.

Description. THE common great comfrey hath divers very large and hairy green leaves, lying on the ground, ſo hairy or prickly, that if they touch any tender part of the hands, face, or body, it will cauſe it to itch: the ſtalk that riſeth up from among them, being two or three feet high, hollowed, and cornered, as alſo very hairy, having many ſuch-like leaves as grow below, but runs leſs and leſs up to the top. At the joints of the ſtalks it is divided into many branches, with ſome leaves thereon; and at the ends ſtand many flowers in order one above another, which are ſomewhat long and hollow like the finger of a glove, of a pale whitiſh colour, after which come ſmall black ſeed. The roots are great and long, ſpreading great thick branches under ground, black on the outſide and whitiſh within, ſhort or eaſy to break, and full of a glutinous or clammy juice, of little or no taſte.

There is another ſort in all things like this, ſave only it is ſomewhat leſs, and beareth flowers of a pale purple colour.

PLACE. They grow by ditches and water ſides, and in divers fields that are moiſt, for therein they chiefly delight to grow: the firſt generally through all the land, and the other not quite ſo common.

TIME. They flower in June and July, and give their ſeed in Auguſt.

GOVERNMENT AND VIRTUES. This is alſo an herb of Saturn, and I ſuppoſe under the ſign Capricorn, cold, dry, and earthy, in quality. What was ſpoken of clown's woundwort may be ſaid of this; the great comfrey helpeth thoſe that ſpit blood, or make a bloody urine; the root boiled in water or wine, and the decoction drunk, helpeth all inward hurts, bruiſes, and wounds, and the ulcers of the lungs, cauſing the phlegm that oppreſſeth them to be eaſily ſpit forth; it ſtayeth the defluxions of rheum from the head upon the lungs, the fluxes of blood or humours by the belly, women's immoderate courſes, as well the reds as the whites; and the running of the reins, happening by what cauſe ſoever. A ſyrup made thereof is very effectual for all thoſe inward griefs and hurts; and the diſtilled water for the ſame purpoſe alſo, and for outward wounds and ſores in the fleſhy or ſinewy part of the body whereſoever; as alſo to take away the fits of agues, and to allay the ſharpneſs of humours. A decoction of the leaves hereof is available to all the purpoſes, though not ſo effectual as of the roots. The root, being outwardly applied, helpeth freſh wounds or cuts immediately, being bruiſed and laid thereunto; and is eſpecial good for ruptures and broken bones; yea, it is ſaid to be ſo powerful to conſolidate and knit together, that, if they are boiled with diſſevered pieces of fleſh in a pot, it will join them together again. It is good to be applied to women's breaſts that grow ſore by the abundance of milk coming into them; as alſo to repreſs the overmuch bleeding of the hemorrhoids, to cool the inflammation of the parts thereabout, and to give eaſe of pains. The roots of comfrey taken freſh, beaten ſmall, and ſpread upon leather, and laid upon any place troubled with the gout, do preſently give eaſe of the pains; and applied in the ſame manner, give eaſe to pained joints, and profit very much for running and moiſt ulcers, gangrenes, mortifications, and the like, for which it hath by often experience been found helpful.

## CORALWORT.

IT is alſo called by ſome, toothwort, toothed violet, dog-teeth violet, and dentaris.

Description. Of the many ſorts of this herb, two of them may be found growing in this kingdom; the firſt of which ſhooteth forth one or two winged leaves upon long browniſh footſtalks, which are doubled down at their firſt coming out of the ground: when they are fully opened they conſiſt of ſeven leaves, moſt commonly of a ſad-green colour, dented about the edges, ſet on both ſides the middle rib one againſt another, as the leaves of the aſh-tree; the ſtalk beareth no leaves on the lower half of it, the upper half beareth ſometimes three or four, each conſiſting of five leaves, ſometimes but of three; on the top ſtand four or five flowers upon ſhort foot-ſtalks, with long huſks; the flowers are very like thoſe of the ſtock gilliflower, of a pale purpliſh colour, conſiſting of four leaves apiece, after which come ſmall cods which contain the ſeed: the root is very ſmooth, white, and ſhining; it doth not grow downwards, but creeping along under the upper cruſt of the ground, and conſiſteth of divers ſmall round knobs, ſet together: towards the top of the ſtalk, there grow ſmall ſingle leaves, by each of which cometh a ſmall round cloven bulb, which when it is ripe, if it be ſet in the ground, it will grow to be a root, and is eſteemed a good way of cultivating the herb.

As for the other coralwort which groweth in this nation, it is more ſcarce than this, being a very ſmall plant, not much unlike crowfoot, therefore ſome think it to be one of the ſorts of crowfoot. I know not where to direct you to it, and therefore ſhall forbear the deſcription.

Place. The firſt groweth near Mayfield in Suſſex, in a wood called High-reed, and in another wood there alſo, called Fox-holes.

Time. They flower from the latter end of April to the middle of May, and before the middle of July they are gone and not to be found.

Government and Virtues. It is under the dominion of the Moon. It cleanſeth the bladder and provoketh urine, expels gravel and the ſtone, it eaſeth pains in the ſides and bowels; it is excellent good for inward wounds, eſpecially ſuch as are made in the breaſt or lungs, by taking a drachm of the powder of the root every morning in wine; the ſame is excellent good for ruptures, as alſo to ſtop fluxes: an ointment made of it is exceeding good for wounds and ulcers, for it ſoon drieth up the watery humour which hinders the cure.

## COSTMARY.

CALLED alſo alecoſt, or balſam herb.

This is ſo frequently known to be an inhabitant in almoſt every garden, that I ſuppoſe it needleſs to write a deſcription thereof.

Time. It flowereth in June and July.

Government and Virtues. It is under the dominion of Jupiter. The ordinary coſtmary, as well as maudlin, provoketh urine abundantly, and moiſteneth the hardneſs of the mother; it gently purgeth choler and phlegm, extenuating that which is groſs, and cutting that which is tough and glutinous, cleanſeth that which is foul, and hindereth putrefaction and corruption; it diſſolveth without attraction, openeth obſtructions, and healeth their evil effects, and is a wondeful help to all ſorts of dry agues. It is aſtringent to the ſtomach, and ſtrengtheneth the liver, and all the other inward parts, and if taken in whey worketh the more effectually. Taken faſting in the morning, it is very profitable for the pains of the head that are continual, and to ſtay, dry up, and conſume, all thin rheums, or diſtillations from the head into the ſtomach, and helpeth much to digeſt raw humours that are gathered therein. It is very profitable for thoſe that are fallen into a continual evil diſpoſition of the whole body called cachexia, being taken, eſpecially in the beginning of the diſeaſe. It is a good friend and help to evil, weak, and cold, livers. The ſeed is familiarly given to children for the worms, and ſo is the infuſion of the flowers in white wine, given them to the quantity of two ounces at a time: it maketh an excellent ſalve to cleanſe and heal old ulcers, being boiled with olive oil, and adder's tongue with it; and after it is ſtrained, to put in a little wax, roſin, and turpentine, to bring it into a convenient body.

## CUDWEED.

BESIDES cudweed, it is alſo called cottonweed, chaffweed, dwarf cotton, and petty cotton.

Description. The common cudweed riſeth up with one ſtalk, though ſometimes two or three, thick ſet on all ſides with ſmall, long, and narrow, whitiſh or woody, leaves, from the middle of the ſtalk almoſt up to the top; with every leaf ſtandeth a ſmall flower, of a dun or browniſh yellow colour, or not ſo yellow as others; in which herbs, after the flowers are fallen, come ſmall ſeed wrapped up with the down therein, and is carried away with the wind. The root is ſmall and thready.

There are other ſorts hereof, which are ſomewhat leſs than the former, not much different, ſave only that the ſtalk and leaves are ſhorter, and the flowers are paler, and more open.

Place. They grow in dry, barren, ſandy, and gravelly, grounds, in moſt places of this land.

Time. They flower about July, ſome earlier and ſome later, and their ſeed is ripe in Auguſt.

Government and Virtues. Venus is lady of it. The plants are all aſtringent, or binding and drying, and therefore profitable for defluxions of rheum from the head, and to ſtay fluxes of blood whereſoever. The decoction being made into red wine and drunk, or the powder taken therein, alſo helpeth the bloody flux, and eaſeth the torments that come thereby, ſtayeth the immoderate courſes of women, and is alſo good for inward or outward wounds, hurts, and bruiſes, and helpeth children both of burſtings and the worms, and the diſeaſe called teneſmus, which is an often provocation to the ſtool, and doing nothing, being either drunk or injected. The green leaves bruiſed and laid to any green wound, ſtayeth the bleeding, and healeth it up quickly; the decoction or juice thereof doth the ſame, and helpeth old and filthy ulcers quickly. The juice of the herb taken in wine and milk, is (as Pliny ſaith) a ſovereign remedy againſt the mumps and quinſey; and further ſaith, that whoſoever ſhall ſo take it ſhall never be troubled with that diſeaſe again. The tops of this plant, before it has reached its full growth, have the ſame virtue. I have ſeen it uſed only in one place. It is frequent in Charlton Foreſt, in Suſſex, and was given with ſucceſs for that almoſt incurable diſeaſe the chin-cough. Beat it up into a conſerve, very fine, with a deal of ſugar, and let the bigneſs of a pea be eaten at a time.

## COWSLIPS.

KNOWN alſo by the name of peagles.

Both the wild and garden cowſlips are ſo well known, that I will neither trouble myſelf nor the reader with any deſcription of them.

Time. They flower in April and May.

Government and Virtues. Venus lays claim to the herb as her own, and it is under the ſign Aries, and our city dames know well enough the ointment or diſtilled

tilled water of it adds beauty, or at leaſt reſtores it when it is loſt. The flowers are held to be more effectual than the leaves, and the roots of little uſe. An ointment being made with them, taketh away ſpots and wrinkles of the ſkin, ſun-burning, and freckles, and adds beauty exceedingly; they remedy all infirmities of the head coming of heat and wind, as vertigo, ephialtes, falſe apparitions, phrenzies, falling ſickneſs, palſies, convulſions, cramps, and pains in the nerves; the roots eaſe pains in the back and bladder, and open the paſſages of urine. The leaves are good in wounds, and the flowers take away trembling. If the flowers be not well dried and kept in a warm place, they will ſoon putrefy and look green; have a ſpecial eye over them. If you let them ſee the ſun once a month, it will do them no harm.

Becauſe they ſtrengthen the brain and nerves; and remedy the palſies, the Greeks gave them the name of *paralyſis*. The flowers preſerved or conſerved, and the quantity of a nutmeg eaten every morning, is a ſufficient doſe for inward diſeaſes; but for wounds, ſpots, wrinkles, and ſun-burning, an ointment is made of the leaves, and hog's greaſe.

## CRAB's CLAWS.

CALLED alſo water ſengreen, knight's pond-water, water houſleek, pond-weed, and freſh-water ſoldier.

Description. It hath ſundry long narrow leaves, with ſharp prickles on the edges of them, alſo very ſharp pointed; the ſtalks which bear flowers ſeldom grow ſo high as the leaves, bearing a forked head like a crab's claw, out of which comes a white flower, conſiſting of three leaves, with divers yellowiſh hairy threads in the middle: it taketh root in the mud, in the bottom of the water.

Place. It groweth plentifully in the fens of Lincolnſhire.

Time. It flowereth in June, and uſually from thence till Auguſt.

Government and Virtues. It is a plant under the dominion of Venus, and therefore a great ſtrengthener of the reins; it is excellent good in that inflammation which is commonly called St. Anthony's fire; it aſſuageth all inflammations and ſwellings in wounds; and an ointment made of it is excellent good to heal them: there is ſcarce a better remedy growing than this for ſuch as have bruiſed their kidneys, and upon that account piſſing blood. A drachm of the powder of the herb taken every morning is a very good remedy to ſtop the terms.

## BLACK-CRESSES.

Description. IT hath long leaves deeply cut and jagged on both ſides, not much unlike wild muſtard; the ſtalks are ſmall, very limber though very tough; you may twiſt them round as you may a willow before they break. The flowers are very ſmall and yellow, after which come ſmall cods which contain the ſeed.

Place. It is a common herb, grows uſually by the way ſides, and ſometimes upon mud walls about London, but it delights moſt to grow among ſtones and rubbiſh.

Time. It flowers in June and July, and the ſeed is ripe in Auguſt and September.

Government and Virtues. It is under the dominion of Mars, and is a plant of a hot and biting nature: the truth is, the ſeed of black creſſes ſtrengthens the brain exceedingly, for in performing that office it is little inferior to muſtard-ſeed, if at all: they are excellent good to ſtay thoſe rheums which fall down from the head upon the lungs. You may beat the ſeed into powder if you pleaſe, and make it up into an electuary with honey, ſo have you an excellent remedy by you, not only for the premiſes, but alſo for the cough, yellow-jaundice, and ſciatica. The herb boiled into a poultice, is an excellent remedy for inflammations both in women's breaſts and in men's teſticles.

## SCIATICA CRESSES.

Description. THESE are of two kinds; the firſt riſeth up with a round ſtalk, about two feet high, ſpread into divers branches, whoſe lower leaves are ſomewhat larger than the upper, yet all of them cut or torn on the edges, ſomewhat like garden creſſes, but ſmaller: the flowers are ſmall and white, growing on the tops of the branches, where afterwards grow huſks, with ſmalliſh brown ſeed therein, very ſtrong and ſharp in taſte, more than the creſſes of the garden. The root is long, white, and woody.

The other ſort hath the lower leaves whole, ſomewhat long and broad, not torn at all but only ſomewhat deeply dented about the edges toward the ends, but thoſe that grow higher up are leſs. The flowers and ſeed are like the former, and ſo is the root likewiſe: and both root and ſeed as ſharp as it.

Place. Theſe grow by the way ſides in untilled places, and by the ſides of old walls.

Time. They flower in the end of June, and their ſeed is ripe in July.

Government and Virtues. It is a Saturnine plant: the leaves, but eſpecially the roots, taken freſh in the ſummer time, beaten and made into a poultice or ſalve with old hog's greaſe, and applied to the places pained with the ſciatica, to continue thereon four hours if it be on a man, and two hours on a woman, the place afterwards bathed with wine and oil mixed together, and then wrapped with wool or ſkins after they have ſweat a little, will aſſuredly cure not only the ſame diſeaſe in the hips, huckle-bone, or other of the joints, as gout in the hands or feet, but all other old griefs of the head, (as inveterate rheums,) and other parts of the body that are hard to be cured. And, if of the former griefs any parts remain, the ſame medicine after twenty days is to be applied again. The ſame is alſo effectual in the diſeaſe of the ſpleen; and, applied to the ſkin, it taketh away the blemiſhes thereof, whether they be ſcars, leproſy, ſcabs, or ſcurf, which although it ulcerate the part, yet that is to be helped afterwards with a ſalve made of oil and wax. Either boiled or eaten in ſallads, they are very wholeſome. For children's ſcabs or ſcalded heads, nothing is ſo effectual and quick a remedy as garden-creſſes beat up with lard, for it makes the ſcales fall in twenty-four hours, and perfectly cures them if they continue the uſe of it. Eſteem this as a valuable ſecret.

## WATER-CRESSES.

Description. OUR ordinary water-creſſes ſpread forth with many weak, hollow, ſappy, ſtalks, ſhooting out fibres at the joints, and upwards long-winged leaves, made of ſundry broad, ſappy, and almoſt round, leaves, of a browniſh green colour: the flowers are many and white, ſtanding on long footſtalks, after which come ſmall yellow ſeed, contained in ſmall long pods like horns; the whole plant abideth green in the winter, and taſteth ſomewhat hot and ſharp.

Place. They grow for the moſt part in ſmall-ſtanding waters, yet ſometimes in ſmall rivulets of running water.

Time. They flower and ſeed in the beginning of ſummer.

Government and Virtues. It is an herb under the dominion of the Moon. It is more powerful againſt the ſcurvy, and to cleanſe the blood and humours, than brooklime, and ſerves in all the other uſes in which brooklime is available; as to break the ſtone, and provoke urine and women's courſes. It is alſo good for them when troubled with the green-ſickneſs, and it is a certain reſtorative of their loſt colour if they uſe it in the following manner: chop and boil them in the broth of meat, and eat them for a month together, morning, noon, and night. The decoction thereof cleanſeth ulcers by waſhing therewith; the leaves bruiſed, or the juice, is good to be applied to the face or other parts troubled with freckles, pimples, ſpots, or the like, at night, and waſhed away in the morning. The juice mixed with vinegar, and the forepart of the head bathed therewith, is very good for thoſe that are dull and drowſy, or have the lethargy.

Water-creſs pottage is a good remedy to cleanſe the blood in the ſpring, and help head-achs, and conſume the groſs humours winter has left behind; thoſe who would live in health, may make uſe of this; if any fancy not pottage, they may eat the herb as a ſallad.

## CROSS-WORT.

Description. COMMON croſs-wort groweth with ſquare hairy brown ſtalks little above a foot high, having four ſmall, broad, and pointed, hairy, yet ſmooth, green leaves, growing at every joint, each againſt other croſsways, which has cauſed the name. Toward the tops of the ſtalks at the joints, with the leaves in three or four rows downward, ſtand ſmall pale-yellow flowers, after which come ſmall, blackiſh, round, ſeeds, four for the moſt part in every huſk; the root is very ſmall and full of fibres or threads, taking good hold of the ground, and ſpreading with the branches a great deal of ground, which periſh not in winter, although the leaves die every year, and ſpring again a-new.

Place. It groweth in many moiſt grounds, as well meadows as untilled places about London, in Hampſtead church-yard, at Wye in Kent, and ſundry other places.

Time. It flowereth from May all the ſummer long, in one place or another, as they are more open to the ſun; the ſeed ripeneth ſoon after.

Government and Virtues. It is under the dominion of Saturn. This is a ſingular good wound-herb, and is uſed inwardly, not only to ſtay bleeding of wounds, but to conſolidate them, as it doth outwardly any green wound, which it quickly drieth up and healeth. The decoction of the herb in wine helpeth to expectorate phlegm out of the cheſt, and is good for obſtructions in the breaſt, ſtomach, or bowels, and helpeth a decayed appetite. It is alſo good to waſh any wound or ſore with, to cleanſe and heal it. The herb bruiſed and then boiled, and applied outwardly for certain days together, renewing it often, and in the mean time the decoction of the herb in wine taken inwardly every day, doth certainly cure the rupture in any, ſo as it be not too inveterate; but very ſpeedily, if it be freſh and lately taken.

## CROWFOOT.

MANY are the names this furious biting herb hath obtained; it is called frog's foot, from the Greek name *barrakion*, crowfoot, gold-knobs, gold-cups, king's-knob, baffiners, troil-flowers, polts, locket-goulions, and butter-flowers.

Abundant are the ſorts of this herb, and to deſcribe them all would tire the patience of Socrates himſelf; therefore I ſhall only mention the moſt uſual.

Description. The moſt common crowfoot hath many dark-green leaves, cut into divers parts, in taſte biting and ſharp, and bliſtering the tongue; it bears many flowers, and thoſe of a bright reſplendent yellow colour. I do not remember that I ever ſaw any thing yellower. Virgins in ancient times uſed to make powder of them to furrow bride-beds. After the flowers come ſmall heads, ſomewhat ſpiked and rugged like a pine-apple.

Place. They grow very common every where; unleſs you turn your head into a hedge, you cannot but ſee them as you walk.

Time. They flower in May and June, even till September.

Government and Virtues. This fiery and hot-ſpirited herb of Mars is no way fit to be given inwardly, but an ointment of the leaves or flowers will draw a bliſter, and may be ſo fitly applied to the nape of the neck, to draw back rheum from the eyes. The herb being bruiſed, and mixed with a little muſtard, draws a bliſter as well and as perfectly as cantharides, and with far leſs danger to the veſſels of urine, which cantharides naturally delight to wrong. I knew the herb once applied to a peſtilential riſing that was fallen down, and it ſaved life even beyond hope; it were good keeping an ointment and plaſter of it, if it were but for that.

## CUCKOW-POINT.

IT is called aron, janus, and barba-aron, calves-foot, ramp, ſtarch-wort, cuckow-pintle, prieſt's pintle, and wake-robin.

Description. This ſhooteth forth three, four, or five, leaves at the moſt, from one root, every one whereof is ſomewhat large and long, broad at the bottom next the ſtalk, and forked, but ending in a point, without a cut on the edges, of a full green colour, each ſtanding upon a thick round ſtalk, of a handful breadth long, or more, among which, after two or three months that they begin to wither, riſeth up a bare, round, whitiſh-green, ſtalk, ſpotted and ſtreaked with purple, ſomewhat higher than the leaves; at the top whereof ſtandeth a long hollow houſe or huſk, cloſe at the bottom, but open from the middle upwards, ending in a point; in the middle whereof ſtands the ſmall long peſtle or clapper, ſmaller at the bottom than at the top, of a dark-purple colour, as the huſk is on the inſide, though green without; which after it hath ſo abided for ſome time, the huſk with the clapper decayeth, and the foot or bottom thereof groweth to be a ſmall long bunch of berries, green at the firſt, and of a yellowiſh-red colour when they are ripe, of the ſize of a hazel-nut kernel, which abideth thereon almoſt until winter; the root is round, and ſomewhat long, for the moſt part lying along, the leaves ſhooting forth at the bigger end, which, when it beareth its berries, are ſomewhat wrinkled and looſe, another growing under it, which is ſolid and firm, with many ſmall threads hanging thereat. The whole plant is of a very ſharp biting taſte, pricking the tongue as nettles do the hands, and ſo abideth for a great while without alteration. The root hereof was anciently uſed inſtead of ſtarch to ſtarch linen.

There is another ſort of cuckow-point, with ſmaller leaves than the former, and ſometimes harder, having blackiſh ſpots upon them, which for the moſt part abide longer green in ſummer than the former, and both leaves and roots are more ſharp and fierce than it; in all things elſe it is like the former.

Place. Theſe two ſorts grow frequently almoſt under every hedge-ſide in many places of this land.

Time. They ſhoot forth leaves in the ſpring, and continue only until the middle of ſummer, or ſomewhat later; their huſks appearing before they fall away, and their fruit ſhewing in April.

Government and Virtues. It is under the dominion of Mars. Tragus reporteth that a drachm weight, or more, if need be, of the ſpotted wake-robin, either freſh and green or dried, being eaten or taken, is a moſt preſent and ſure remedy for poiſon and the plague. The juice of the herb taken to the quantity of a ſpoonful hath the ſame effect; but if there be a little vinegar added thereunto, as well as unto the root aforeſaid, it ſomewhat allayeth the ſharp biting taſte thereof upon the tongue. The green leaves bruiſed, and laid upon any boil or plague-ſore, do very wonderfully help to draw forth the poiſon. A drachm of the powder of the dried root taken with twice as much ſugar in the form of a licking electuary, or the green root, doth wonderfully help thoſe that are purſy or ſhort winded, as alſo thoſe that have a cough; it breaketh, digeſteth, and riddeth away, phlegm, from the ſtomach, cheſt, and lungs. The milk wherein the root hath been boiled is effectual alſo for the ſame purpoſe. The ſaid powder taken in wine or other drink, or the juice of the berries, or the powder of them, or the wine wherein they have been boiled, provoketh urine, and brings down women's courſes, and purges them effectually after child-bearing, to bring away the afterbirth: taken with ſheep's milk, it heals the inward ulcers of the bowels. The diſtilled water hereof is effectual to all the purpoſes aforeſaid. A ſpoonful taken at a time heals the itch; and an ounce or more taken at a time for ſome days together doth help the rupture; the leaves, either green or dry, or the juice of them, will cleanſe all manner of rotten and filthy ulcers, in what part of the body ſoever, and heal the ſtinking ſores in the noſe, called *polypus*. The water wherein the root hath been boiled, dropped into the eyes, cleanſeth them from any film or ſkin, cloud or miſt, which begins to hinder ſight, and helpeth the watering and redneſs of them; or when, by accident, they become black and blue. The root mixed with bean-flour, and applied to the throat or jaws that are inflamed, helpeth them; the juice of the berries boiled in oil of roſes, or beaten into powder mixed with the oil, and dropped into the ears, eaſeth pains in them: the berries or the roots, beaten with hot ox-dung and applied, eaſe the pains of the gout: the leaves and roots boiled in wine with a little oil, and applied to the piles, or the falling down of the fundament, eaſe them, and ſo doth ſitting over the hot fumes thereof: the freſh roots bruiſed, and diſtilled with a little milk, yield a moſt ſovereign water to cleanſe the ſkin from ſcurf, freckles, ſpots, or blemiſhes whatſoever therein. The country people about Maidſtone in Kent uſe the herb and root inſtead of ſoap.

## CUCUMBERS.

ACCORDING to the pronunciation of the vulgar, cowcumbers.

Government and Virtues. There is no diſpute to be made, but that they are under the dominion of the Moon, though they are ſo much rejected for their coldneſs; it is by ſome affirmed, that if they were but one degree colder they would be poiſon. The beſt of Galeniſts hold them to be cold and moiſt but in the ſecond degree, and then not ſo hot as lettuce or purſlane: they are excellent good for hot ſtomachs and livers; the immeaſurable uſe of them fills the body full of raw humours, and ſo indeed does any thing elſe when uſed to an exceſs. The juice of cucumbers, the face being waſhed with it, cleanſeth the ſkin, and is excellent good for hot rheum in the eyes; the ſeed is excellent to provoke urine, and cleanſe the paſſages thereof when they are ſtopped; neither do I think there is a better remedy for ulcers in the bladder growing than cucumbers are; the uſual courſe is to uſe the ſeeds in emulſions, as they make almond-milk; but a better way by far (in my opinion) is this: when the ſeaſon of the year is, take the cucumbers and bruiſe them well, and diſtil the water from them, and let ſuch as are troubled with ulcers in their bladders drink no other drink. The ſame water, uſed as a lotion, cureth the reddeſt face that is. It is alſo excellent good for ſun-burning, freckles, and morphew.

## CUBEBS.

CUBEBS are ſmall berries, ſomewhat ſweet, about the bigneſs of pepper-corns, yet not ſo black nor ſolid, but more rugged or creſted, being either hollow, or having a kernel within, of a hot taſte, but not ſo fiery as pepper; and having each a ſhort ſtalk on them like a tail: theſe grow on trees leſs than apple-trees, with leaves narrower than thoſe of pepper; the flower is ſweet, and the fruit groweth cluſtering together. The Arabians call them *quabebe*, and *quabebe chini:* they grow plentifully in Java; they are uſed to ſtir up venery, and to warm and ſtrengthen the ſtomach, when it is overcome with phlegm or wind; they cleanſe the breaſt of thick tough humours, help the ſpleen, and are very profitable for the cold griefs of the womb. Being chewed in the mouth with maſtic, they draw rheum from the head, and ſtrengthen the brain and memory.

## RED, WHITE, AND BLACK, CURRANTS.

Names. THE Latin names for currants, are *ribes*, and *ribes fructu rubro* the red currant, *albo* white, and *nigro* black.

Description. The red currant buſh hath a ſtalk covered with a thin browniſh bark outwards, and greeniſh underneath; the leaves are of a blackiſh green, cut on the edges into five parts, much like a vine-leaf, but ſmaller; the flowers come forth at the joints of the leaves, many together on a long ſtalk, hanging down about a finger's length; of an herby colour, after which come round berries, green at the firſt, but red when they are ripe: of a pleaſant tart taſte, wherein is ſmall ſeed. The root is woody and ſpreading.

There is another ſort hereof, whoſe berries are twice as large as the former, and of a better reliſh.

The white currant tree hath a taller and ſtraiter ſtem than the red, a whiter bark, and ſmaller leaves, but hath ſuch-like berries upon long ſtalks, of the ſame bigneſs as the firſt, but of a ſhining tranſparent whiteneſs, and of a more pleaſant taſte than the former.

The black currant riſeth higher than the laſt, and is thicker ſet with branches round about, and more pliant, the younger covered with a pale, and the elder with a browner, bark; the leaves are ſmaller than thoſe of the former, and often with fewer cuts therein: the flowers are alike, but of a greeniſh-purple colour, which produce ſmall black berries: the leaves and fruit have an unpleaſant ſmell, but yet are wholeſome, though not palatable.

Place. All theſe ſorts of currants grow plentifully in England, in gardens where they are planted; they have been found growing naturally wild in Savoy and Switzerland, as Geſner ſaith; and ſome in Auſtria, ſaith Clauſius: they grow in great abundance in Candia, and in other places in the Straights, from whence in great quantities they are brought dried unto us.

Time. They flower and bear fruit in June, July, and Auguſt.

Government and Virtues. Currants are under the influence of the benevolent planet Venus; they are of a moſt temperate refreſhing nature; the red and white currants are good to cool and refreſh faintings of the ſtomach, to quench thirſt, and ſtir up an appetite, and therefore are profitable in hot and ſharp agues. They temper the heat of the liver and blood, and the ſharpneſs of choler, and reſiſt putrefaction; they alſo take away the loathing of meat, and weakneſs of the ſtomach, by much vomiting, and are good for thoſe that have any looſeneſs of the belly. Geſner ſaith that the Switzers uſe them for the cough, and ſo well they may; for, take dry currants a quarter of a pound, of brandy half a pint, ſet the brandy on fire, then bruiſe the currants and put them into the brandy while it is burning, ſtirring them until the brandy is almoſt conſumed, and it becomes like unto an electuary; it is an excellent remedy to be taken for any violent cough, cold, or rheum. The black-currants and the leaves are uſed in ſauces by thoſe who like the taſte and ſcent of them; which I believe very few do of either.

## COCOA-NUT TREE.

Description and Names. THIS groweth to be a large timber-tree, the body covered with a ſmooth bark; bare or naked, without any branch, to a great height, (for which cauſe the Indians either do bore holes therein, at certain diſtances, and knock ſtrong pegs into them, which ſtick out ſo far as may ſerve for footing to g up into the tree, to gather the juice or liquor, and the fruit, or faſten ropes with nails round about the tree, with ſpaces which ſerve as ſteps to go up into it,) and towards the top it ſpreadeth out into ſundry great arms, which bow themſelves almoſt round; with large leaves on them like the date-tree leaf, but larger, whoſe middle rib is very great, and abiding always green, and with fruit alſo, continually one ſucceeding another: from between the lower boughs come forth ſmaller ſtalks, hanging down, and bearing ſundry flowers on them, like thoſe of the cheſnut-tree; after which come large three-ſquare fruit or nuts, ten or twelve and ſometimes twenty thereon together, as big as one's head, or as a ſmall pompion, almoſt round, but a little ſmaller at the end, covered with a hard, tough, aſh-coloured, thick bark, an inch thick in ſome places, and within it a hard, woody, browniſh, ſhell, but which becomes black when poliſhed; having at the head or top thereof three holes, ſomewhat reſembling the noſe and eyes of a monkey; between which outer bark and this ſhell grow many groſs threads or hairs; within the wooden ſhell there is a white kernel cleaving cloſe to the ſide thereof, as ſweet as an almond, with a fine ſweet water in the middle as pleaſant as milk, which will grow leſs pleaſant, or conſume, either by over ripeneſs or long keeping. The tree is called by the Indians *maro*, in Malacca *trican*, and in other places by ſeveral other appellations. The timber of the tree is ſolid and firm, black and ſhining like the walnut-tree, and fit for any building; and Garcias ſaith, it is of two ſorts, (I ſuppoſe he meaneth for two uſes,) the one to bear fruit, the other to attract the liquor which iſſues therefrom, when the branches are cut, or when it is bored, and received into ſomething tied thereunto for that purpoſe, which liquor they call in their language *ſura*; and it ſheweth like unto troubled wine, but in taſte like new ſweet wine, which being boiled they call *orraque*; and being diſtilled it yieldeth a ſpirit like unto our aqua vitæ, and it is uſed for the ſame purpoſe as we do ours, and will burn like it: they call it *fula*, and being ſet in the ſun it will become good vinegar, and that which runneth laſt, being ſet in the ſun to grow hard, or boiled to hardneſs, will become ſugar, which they call *jagra*. Of the inner kernel, while it is freſh, they make bread; the freſher the nuts are, the ſweeter is the meat thereof.

Government and Virtues. This is a ſolar plant; the fruit or kernel of the cocoa-nut doth nouriſh very much, and is good for lean bodies; they increaſe the natural ſeed, and ſtir up the appetite to venery, and are good to mollify the hoarſeneſs of the throat and voice.

## COFFEE.

THIS is reported to be the berries of certain ſhrubs or buſhes growing in Arabia, and from thence into Turkey, and other parts. It is ſaid of itſelf to be inſipid, having neither ſcent nor taſte; but being pounded and baked, as they do prepare it to make the coffee-liquor with, it then ſtinks moſt loathſomely, which is an argument of ſome Saturnine quality in it: the propugners for this filthy drink affirm that it cauſeth watchfulneſs; (ſo doth the ſtinking hemlock and henbane in their firſt operation if unhappily taken into the body, but their worſe effects ſoon follow;) they alſo ſay it makes them ſober when they are drunk; yet they would be always accounted ſober perſons, or at leaſt think themſelves ſo, when they can but once ſit down in a coffee-houſe. If there had been any worth in it, ſome of the ancient Arabian phyſicians, or others near thoſe parts, would have recorded it; but there is no mention made of any medicinal uſe thereof, by any author, either ancient or modern; neither can it be indued with any ſuch properties as the indulgers of it feed their fancy with; but this I may truly ſay of it, *Quod Anglorum corpora, quæ huic liquori tantopere indulgent, in barbarorum naturam degeneraſſe videntur.*

## CYPRESS-TREE.

Names. It has no other name in Engliſh, but this tree is called *cupreſſus* in Latin; and the nuts or fruit thereof, *nuces cupreſſi*; in Engliſh, cypreſs-nuts.

Description. The cypreſs-tree hath a thick, ſtraight, long, ſtem; upon which grow many ſlender branches; which do not ſpread abroad, but grow up in length towards the top, ſo that the cypreſs-tree is not broad, but narrow, growing to a great height; the bark of the cypreſs-tree is brown, the timber yellowiſh, hard, thick, and cloſe, and when it is dry of a pleaſant ſmell, eſpecially if it be ſet near the fire. The cypreſs-tree hath no particular leaves, but the branches, inſtead of leaves, bring forth ſhort twigs, cut and ſnipped in many places, as if they were ſet about with many ſmall leaves; the fruit is round, almoſt as big as a prune or plumb, which being ripe doth open in divers places, and hath in it a flat greyiſh ſeed.

Place. The cypreſs-tree delights in dry, hilly, and mountainous, places, in hot countries.

Time. The cypreſs-tree is always green; the fruit is ripe in September, at the beginning of winter.

Government and Virtues. Saturn rules this plant; the leaves and fruit are dry in the third degree, without any manifeſt heat, and very aſtringent; the fruit of cypreſs, taken into the body, ſtoppeth looſeneſs and the bloody-flux, and is good againſt ſpitting of blood, and all other iſſues of blood; the decoction of the ſame, made with water, hath the ſame virtue. The oil, in which the fruit or leaves of cypreſs have been boiled, doth ſtrengthen the ſtomach, ſtayeth vomiting, ſtoppeth the belly, and all fluxes of the ſame, and cureth the excoriation or going off of the ſkin from the ſecret members. Cypreſs-nuts cure thoſe who are burſten and that have their bowels fallen into the ſcrotum, being outwardly applied in cataplaſms thereto; the leaves have the ſame virtue, but not ſo ſtrong; the fruit of cypreſs is alſo good to cure the polypus, which is corrupt fleſh growing in the noſe. The ſame, bruiſed with dry figs, doth cure the blaſting and ſwelling of the yard and ſtones; and, if leavens he added thereto, it diſſolveth and waſteth blotches and boils, being laid upon the grieved place. The leaves of cypreſs, boiled in ſweet wine or mead, help the ſtranguary, and iſſue of the bladder; the ſame, beaten very ſmall and applied, cloſe up green wounds, and ſtop the bleeding thereof; and, being applied with parched barley-meal, they are profitable againſt St. Anthony's fire, carbuncles, and other ulcers, and fretting ſores; the leaves and fruit of cypreſs, being infuſed in vinegar, and the hair waſhed therewith, make it black.

## CEDAR-TREE.

Names. There are two kinds hereof, the great cedar-tree and the ſmall cedar; out of the great tree iſſueth a white roſin, called in Latin *cedria*, and *liquor cedrinus*, or liquor of cedar.

Description. The greater cedar groweth very tall, high, great, and thick; the bark from the foot of the ſtem unto the firſt branches is rough, and from thence up to the top it is ſmooth and plain, of a dark-blue colour, out of which there droppeth white roſin of its own kind, which is moſt odoriferous, or of a ſweet ſmell, and by the heat of the ſun it becomes dry and hard; the limbs and branches of this tree are long, and parted into many other ſmall branches, ſtanding directly one againſt another, like thoſe of the fir-tree; the ſaid branches are garniſhed with many ſmall leaves, thick and ſhort, having a ſweet ſavour; the fruit is like that of the fir-tree, but larger, thicker, and harder; the whole tree groweth ſtraight up like the fir-tree.

Of the ſmaller cedar there are two kinds; the firſt kind of ſmall cedar is much like to juniper, but ſomewhat ſmaller, the ſtem is crooked or writhed, and covered with a rough bark; the fruit is round berries, like juniper berries, but ſomewhat greater; of colour at the firſt green, then yellow, and at laſt reddiſh; and of an indifferent good taſte.

The ſecond kind of ſmall cedar groweth not high; but remaineth ſmall and low, like the other; the leaves of this are not prickly, but ſomewhat round and moſſy at the ends, almoſt like the leaves of tamariſk and ſavin; the fruit of this kind beareth alſo round berries, which at firſt are green, afterwards yellow, and, when they are ripe, they become reddiſh, and are bitter in taſte.

Place. The great cedar groweth in Africa and Syria, and upon the mountains of Libanus, Amanus, and Taurus.

The ſecond kind groweth in Phœnicia, and in certain places of Italy, in Calabria, and alſo in Languedoc.

The third kind groweth in Lycia; and is found in certain parts of France, as in Provence and Languedoc.

Time. The great cedar perfecteth its fruit in two years; and it is never without fruit, which is ripe at the beginning of winter. The ſmall cedar-trees are always green, and loaded with fruit, having at all times upon them fruit both ripe and unripe, as hath juniper.

Government and Virtues. The great cedar is under the dominion of the Sun, the ſmaller of Mars; the cedar is hot and dry in the third degree; the roſin or *liquor cedria*, which runneth forth of the great cedar-tree, is hot and dry almoſt in the fourth degree, and of ſubtle parts.

The fruit of the ſmall cedar is alſo hot and dry, but more moderately; *cedria*, that is, the liquor or gum of cedar, aſſuageth the tooth-ach, being put into the hollowneſs of the ſame; alſo, it cleareth the ſight, and taketh away ſpots and ſcars of the eyes, being laid thereon; the ſame dropped into the ears, with vinegar, killeth the worms of the ſame; and, with the wine of the decoction of hyſſop, it cureth the noiſe and ringing in the ears, and makes the hearing good.

The ancient Egyptians did uſe, in times paſt, to preſerve their dead bodies with this *cedria*, for it keepeth the ſame whole, and preſerveth them from corruption, but it conſumeth and corrupteth living fleſh; it killeth lice, moths, worms, and all ſuch vermin, ſo that they will not come near it.

The fruit of the cedar is good to be eaten againſt the ſtranguary; it provokes urine, and bringeth down women's courſes.

## CISTUS.

Kinds and Names. OF this there are two ſorts, the firſt called *ciſtus non ladanifera*, becauſe it beareth no ladanum; the other is a plant of a woody ſubſtance, upon which is found that fat liquor or gum, called ladanum.

The firſt kind, which yieldeth no ladanum, is alſo of two ſorts viz. male and female.

The male beareth red flowers, the female white; in all things elſe the one is like the other; out of the root of the female ciſtus is drawn forth a ſap or liquor called hippociſtis.

The ſecond kind of ciſtus is called alſo *ledum* and *ladum*; the fat liquor which is gathered from it is called ladanum, and in ſhops lapdanum.

Description. The firſt kind of ciſtus, which beareth no ladanum, hath round hairy ſtalks, and ſtems with knotted joints, and full of branches; the leaves are roundiſh, and covered with a cotton of ſoft hair, not much unlike the leaves of ſage, but ſhorter and rounder; the flowers grow at the tops of the ſtalks, of the faſhion of a ſingle roſe, whereof the male kind is of colour red, and the female white; at the laſt they change into knops or huſks wherein the ſeed is contained.

There is found a certain excreſcence or out-growing, about the root of this plant, which is of colour ſometimes yellow, ſometimes white, and ſometimes green; out of which is artificially drawn a certain juice, which in ſhops is called hypociſtis, and is uſed in medicine.

The ſecond kind of ciſtus, which is alſo called *ledum*, is a plant of a woody ſubſtance, growing like a little tree or ſhrub, with ſoft leaves, in figure not much unlike the others, but longer and browner; upon the leaves of this plant is found that fat ſubſtance called ladanum, which is generally about midſummer and the hotteſt days.

Place. The firſt kind of ciſtus groweth in Italy, Sicily, Candia, Cyprus, Languedoc, and other hot countries, in rough and untilled places.

The ſecond kind groweth alſo in Crete, Cyprus, and Languedoc.

Time. The firſt kind of ciſtus flowereth in June, and ſometimes ſooner.

The ſecond kind of ciſtus flowereth and bringeth forth ſeed in the ſpring-time, and immediately after the leaves fall off, and about midſummer new leaves riſe up; upon which leaves, in the hotteſt days, is found a certain fatneſs which is diligently gathered and dried, and makes that gum which is called lapdanum.

Government and Virtues. Theſe plants are governed by Jupiter; the flowers and leaves of ciſtus are dry in the ſecond degree, and ſomewhat aſtringent; that which groweth about the roots is of like temperature, but more aſtringent; lapdanum is hot in the ſecond degree almoſt, and is ſomewhat dry and aſtringent. The flowers of ciſtus, boiled in wine and drunk, ſtop the laſk, and all iſſues of blood; and dry up ſuperfluous moiſture, as well as of the ſtomach as other parts of the belly; the leaves do cure and heal green wounds, being laid thereupon. Hypociſtis ſtoppeth all fluxes of the belly, and is of a ſtronger operation than the flowers and leaves of ciſtus; wherefore it cureth the bloody flux, and the immoderate overflowing of women's courſes. Ladanum drunk with old wine ſtoppeth the laſk and provoketh urine; it is very good againſt the hardneſs of the matrix or mother, uſed in manner of a peſſary; it draweth down the ſecundine or after-birth, when it is laid upon quick coals, and the fumigation or ſmoke thereof received up into the matrix; the ſame applied to the head with myrrh, or oil of myrrh, cureth the ſcurf thereof, and keepeth the hair from falling off; if it be dropped into the ears, with honeyed water or oil of roſes, it healeth pains in the ears. It taketh away the ſcars of wounds, being applied thereunto with wine; it is alſo very profitable mixed with all ungents and plaſters that ſerve to heat, moiſten, and aſſuage pains; and for ſuch as are laid to the breaſt againſt the cough.

## COCKLE.

Names. It is called alſo nigel-weed, and field-nigella.

Description. It hath ſtraight, ſlender, hairy, ſtems; the leaves are alſo long, narrow, hairy, and greyiſh; the flowers are of a brown-purple colour, changing towards red, divided into five ſmall leaves, not much differing from the proportion of wild campions; after which there groweth round cups, wherein is contained plenty of ſeed, of a black-brown colour.

Place. It is too frequent amongſt corn, wheat, rye, and barley.

Time. It flowers in May, June, and July.

Government and Virtues. This unprofitable gueſt amongſt corn is of a Saturnine quality, cauſeth giddineſs of the head, and ſtupifies if it gets amongſt the corn to be made with it into bread, and, howſoever taken, it is dangerous and hurtful; although ſome ignorant perſons have miſtaken it for the right nigella, or uſed it inſtead of yuray or darnel, to the great danger of the patient.

## CORIANDER.

Names. IT is called in ſhops coriandrum, in Engliſh coriander, and in ſome counties colyander.

Description. This is a ſtinking plant; it beareth a round ſtalk, full of branches, each about a foot and a half long; the leaves are whitiſh, all jagged and cut; the under leaves that ſpring up firſt are almoſt like the leaves of chervil or parſley, and the upper leaves are not much unlike the ſame, or rather like to fumitory leaves, but a great deal tenderer, and more jagged; the flowers are white, and grow in round tufts; the ſeed is all round, and hollow within, and of a very pleaſant ſcent when it is dry; the root is hard, and of a woody ſubſtance.

Place. It is ſown in gardens, and loveth a good ſoil.

Time. It flowereth in July and Auguſt, and the ſeed is ripe ſhortly after.

Government and Virtues. The green plant is cold and dry, of a Saturnine quality, hurtful to the body; but the ſweet-ſavouring ſeed is of a warm temperature and uſeful for many purpoſes; the ſeed of coriander, being prepared, and taken alone or covered with ſugar, after meals, cloſeth up the mouth of the ſtomach, ſtayeth vomiting, and helpeth digeſtion; the ſame roaſted or parched, and drunk in wine, killeth and bringeth forth worms out of the body, and ſtoppeth the laſk and bloody flux, and all other extraordinary iſſues of blood. Coriander ought not to be covered with ſugar, or to be put into any meat or medicine, nor uſed any way unprepared: the way of preparing it in this manner, viz. Take of the ſeed of coriander well dried, and pour thereupon good ſtrong wine and vinegar mixed together, and ſo leave them to ſteep for the ſpace of four and twenty hours; then take the ſeeds out of the liquor and dry them, and ſo keep them to be uſed in medicine. The green herb coriander, being boiled with crumbs of white bread, or barley-meal, conſumeth and driveth away hot tumours, ſwellings, and inflammations; and with bean-meal, it diſſolveth the king's evil, hard knobs, &c. The juice applied with ceruſe, litharge of ſilver, vinegar, and oil of roſes, cureth St. Anthony's fire, and aſſuageth and eaſeth the pains of all inflammations.

## COLOQUINTIDA.

Name. IT is alſo called wild bitter-gourd, and the fruit coloquint-apple.

Description. Coloquintida creepeth with its branches along by the ground, with rough hairy leaves, of a greyiſh colour, much cloven or cut; the flowers are bleak or pale; the fruit round, of a green colour at the beginning, and afterwards yellow; the bark thereof is neither thick nor hard, the inner part of the pulp is open and ſpongy, full of grey ſeed, in taſte very bitter; the which is dried, and kept for medicinal uſe.

Place. Coloquintida groweth in Italy and Spain, from which places the dried fruit is brought unto us.

Time. Coloquintida bringeth forth its fruit in September.

Nature and Virtues. It is under the planetary influence of Mars; of temperature hot and dry in the third degree. The white or inward pith or pulp of the apple, taken about the weight of a ſcruple, openeth the belly mightily, purging groſs phlegm and choleric humours; and it cleanſeth the guts of that ſlimy filthineſs and ſtinking corruption which often ſticks about them, and cauſes thoſe pains, gripings, and rumbling of the belly; but, if taken in too great quantity, it cauſes blood to come forth. The like virtue it hath if it be boiled, or laid to ſoak in honeyed water, or any other liquor, and afterwards given as drink. It profiteth much againſt cold dangerous ſickneſſes, giddineſs of the head, pain to fetch breath, the cholic, looſeneſs of the ſinews, and places out of joint; for all which purpoſes, it may be put into clyſters and ſuppoſitories that are put into the fundament. The oil wherein coloquintida hath been boiled, being dropped into the ears, eaſeth the pain and ſinging thereof.

Coloquintida, if adminiſtered by an unſkilful hand, is very dangerous and hurtful to the ſtomach and liver, and troubleth the bowels and entrails; for a remedy, you muſt put to the pulp or pith of coloquintida gum tragacanth and maſtic, and afterwards make it into troches or balls with honey.

## CORNEL-TREE.

Names. IT is called by ſome long-cherry or long-cherry-tree.

Description. The cornel-tree ſometimes groweth up to a reaſonable bigneſs, like other trees, and ſometimes it is but low, and groweth like to a ſhrub or hedge-buſh, as divers other ſmall trees do; the wood or timber of this tree is very hard; the flowers are of a faint yellowiſh colour, the fruit is very red, and ſomewhat long, almoſt like an olive, but ſmaller, with a long little ſtone or kernel incloſed therein, like the ſtone of an olive-berry.

Place. The cornel-tree is in this country to be found no where but in gardens and orchards, where it is planted.

Government and Virtues. It cureth the falling ſickneſs, and gripings in the belly or bowels; it expelleth wind from the ſtomach and entrails, helpeth ſuch as are bruiſed or broken by falls, &c. thoſe that have looſe or weak ſinews, and pains of the ſciatica or hip-gout; and uſed with vinegar it is good againſt ſcabs, and is an ingredient in many of our compoſitions and cordial antidotes.

## CAROB-TREE.

Names. IT is called in ſhops *xylocaracta*, carob, and carobs.

Description. This fruit groweth upon a great tree, whoſe branches are ſmall and covered with a red bark; the leaves are long, and ſpread abroad after the manner of aſhen leaves, conſiſting of ſix or ſeven ſmall leaves growing by a rib, one againſt another, of a ſad dark-green colour above, and of a light green underneath; the fruit is in certain crooked cods or huſks, ſometimes of a foot and a half long, and as broad as one's thumb; ſweet in taſte; in the huſk is contained ſeed, which is large, plain, and of a cheſnut colour.

Place. This plant grows in Spain, Italy, and other hot countries.

Government and Virtues. The fruit of the carob-tree is ſomewhat hot and dry, and aſtringent, eſpecially when it is freſh and green; ſomewhat ſubject to the influence of Saturn: the freſh and green carobs do gently looſen the belly, but are ſomewhat hard of digeſtion, and, if eaten in a great quantity, hurtful to the ſtomach; but being dry they ſtop fluxes of the belly, provoke urine, and are not prejudicial to the ſtomach, being much better to be eaten dry than when freſh gathered or green.

## CASSIA-FISTULA.

Names. IT is called caſſia in the cane, but is uſually known by the general name of caſſia-fiſtula in moſt countries.

Description. The tree which beareth the canes hath leaves not much unlike thoſe of the aſh-tree; they are great, long, and ſpread abroad; made of many leaves growing one againſt another, along by one ſtem; the fruit is round, long, black, and with woodiſh huſks or cods moſt commonly two feet long, and as thick as one's thumb; ſevered or parted in the inſide into divers ſmall cells or chambers, wherein lieth flat and browniſh ſeed, laid together with the pulp, which is black, ſoft, and ſweet, and is called the flour, marrow, or cream, of caſſia, and is very uſeful and profitable in medicine.

Place. It groweth in Syria, Arabia, and the Eaſt Indies; and in the Weſt, as Jamaica.

Government and Virtues. The black pulp, or moiſt ſubſtance, of caſſia, is of a gentle temperature, moderately hot and moiſt in the firſt degree, and under the government of Venus; the inner pulp of caſſia is a ſweet and pleaſant medicine, and may ſafely be given to all weak people, women with child, and young children. It looſeneth the belly gently, and moderately purgeth choleric humours and ſlimy phlegm gathered about the lungs, to be taken the quantity of an ounce at a time.

Caſſia is excellent good for thoſe who are troubled with hot agues, the pleuriſy, jaundice, or any inflammation of the liver; eſpecially being mixed with waters, drinks, or herbs, that are of a cooling nature. It is good to cleanſe the reins and kidneys; it driveth forth gravel and the ſtone, and is a preſervative againſt the ſtone if drunk in the decoction of liquorice, and parſley roots, or ciches. It is good to gargle with caſſia, to aſſuage and mitigate ſwellings of the throat, and to diſſolve, ripen, and break, impoſthumes and tumours.

Avicen writeth, that caſſia, being applied to the part grieved with the gout, aſſuageth the pain.

## CORAL.

Kinds and Names. THERE are ſeveral kinds of coral, but the red and the white, eſpecially the red, are moſt in uſe. There are alſo ſeveral ſorts of black coral, called *antipathes*, and there is a kind of coral which is black, rough, and briſtly, and is called *ſambeggia*.

Description. Theſe plants, although their hard ſubſtance makes them ſeem rather to be ſtones, yet they are vegetables. The great red coral, which is the beſt, groweth upon rocks in the ſea, like unto a ſhrub, with arms and branches, which ſhoot forth into ſprigs, ſome large and ſome ſmall, of a pale-red colour for the moſt part, when it is taken out of the water, but when it is poliſhed it is very fair, and of a beautiful red colour; whilſt it is in the water it is ſoft and pliable, but, being taken out and kept dry a while, it becomes of a hard ſtony ſubſtance.

Place. The corals are found in the iſles of Sardinia, and divers other places.

## DAISIES.

THESE are alſo ſo well known to almoſt every child, that I ſuppoſe it is altogether needleſs to write any deſcription of them. Take therefore the virtues of them as followeth.

Government and Virtues. The herb is under the ſign Cancer, and under the dominion of Venus; and therefore excellent good for wounds in the breaſt, and very fitting to be kept both in oils, ointment, and plaiſters; as alſo in ſyrup. The greater wild daiſy is a wound-herb of good reſpect, often uſed in thoſe drinks or ſalves that are for wounds, either inward or outward; the juice or diſtilled water of theſe, or the ſmall daiſies, doth much temper the heat of choler, and refreſheth the liver and other inward parts. A decoction made of them, and drunk, helpeth to cure the wounds made in the hollowneſs of the breaſt; the ſame alſo cureth all ulcers and puſtules in the mouth or tongue, or in the ſecret parts. The leaves bruiſed and applied to the teſticles, or any other parts that are ſwollen and hot, doth diſſolve it and temper the heat. A decoction made hereof with walwort and agrimony, and the places fomented or bathed therewith warm, giveth great eaſe to thoſe who are troubled with the palſy, ſciatica, or gout; the ſame alſo diſperſeth and diſſolveth the knots or kernels that grow in the fleſh of any part of the body, and the bruiſes and hurts that come by falls and blows; they are alſo uſed for ruptures and other inward burnings, with very good ſucceſs. An ointment made hereof doth wonderfully help all wounds that have inflammations about them, or, by reaſon of moiſt humours having acceſs unto them, are kept long from healing; and ſuch are thoſe, for the moſt part, that happen to the joints of the arms and legs. The juice of them, dropped into the running eyes of any, doth much help them.

## DANDELION,

VULGARLY called piſs-a-beds.

Description. IT is well known to have many long and deeply-gaſhed leaves lying on the ground, round about the head of the root; the ends of each gaſh or jag on both ſides, looking down towards the root, the middle rib being white, which, broken, yieldeth abundance of bitter milk, but the root much more. From among the leaves, which always abide green, ariſe many ſlender, weak, naked, footſtalks, every one of them bearing at the top one large yellow flower, conſiſting of many rows of yellow leaves, broad at the points, and nicked in, with a deep ſpot of yellow in the middle; which growing ripe, the green huſk wherein the flower ſtood turneth itſelf down to the ſtalk, and the head of down becometh as round as a ball, with long reddiſh ſeed underneath, bearing a part of the down on the head of every one, which together is blown away with the wind, or may at once be blown away with one's mouth. The root groweth downwards exceeding deep, which, being broken off within the ground, will, notwithſtanding, ſhoot forth again; and will hardly be deſtroyed when it hath once taken deep root in the ground.

Place. It groweth frequent in all meadows and paſture grounds.

Time. It flowereth in one place or other almoſt all the year long.

Government and Virtues. It is under the dominion of Venus. It is of an opening and cleanſing quality, and therefore very effectual for the obſtructions of the liver, gall, and ſpleen, and the diſeaſes that ariſe from them, as the jaundice and hypochondriacal paſſion. It wonderfully openeth the paſſage of urine, both in young and old; it powerfully cleanſeth apoſthumes, and inward tumours in the urinary paſſages, and by the drying and temperate quality doth afterwards heal them; for which purpoſe the decoction of the roots or leaves in white wine, or the leaves chopped

chopped as pot-herbs with a few aliſanders, and boiled in their broth, is very effectual. And whoever is drawing towards conſumption, or an evil diſpoſition of the whole body, called *cachexia*, by the uſe hereof for ſome time together will find a wonderful help. It helpeth alſo to procure reſt and ſleep to bodies diſtempered by the heat of ague fits, or otherwiſe; the diſtilled water is effectual to drink in peſtilential fevers, and to waſh the ſores.

You ſee here what virtues this common herb hath, and that is the reaſon the French and Dutch ſo often eat them in the ſpring; and now, if you look a little farther, you may plainly perceive that foreign phyſicians are more liberal in communicating their knowledge of the virtues of plants than the Engliſh.

## DARNEL.

IT is alſo called juray, and wray; in Suſſex they call it crop, it being a peſtilent enemy amongſt corn.

Description. This hath all the winter long, ſundry long, fat, and rough, leaves, which when the ſtalk riſeth, which is ſlender and jointed, are narrower, but ſtill rough; on the top groweth a long ſpike, compoſed of many heads, ſet one above another, containing two or three huſks, with ſharp but ſhort beards or hawns at the ends; the ſeed is eaſily ſhaken out of the ears, the huſk itſelf being ſomewhat tough.

Place. The huſbandmen know this too well to grow among their corn; or in the borders and pathways of fields that are fallow.

Government and Virtues. It is a malicious plant of ſullen Saturn. As it is not without ſome vices, ſo hath it alſo many virtues. The meal of darnel is very good to ſtay gangrenes, and other ſuch-like fretting and eating cankers, and putrid ſores; it alſo cleanſeth the ſkin of all leproſies, morphews, ringworms, and the like, if it be uſed with ſalt and raddiſh-roots. And, being uſed with quick brimſtone and vinegar, it diſſolveth knots and kernels, and breaketh thoſe that are hard to be diſſolved, being boiled in wine with pigeon's dung and linſeed; a decoction thereof made with water and honey, and the place bathed therewith, is profitable for the ſciatica. Darnel meal applied in a poultice draweth forth ſplinters and broken bones from the fleſh; the red darnel boiled in red wine, and taken, ſtayeth the laſk and all other fluxes, and women's bloody iſſues; and reſtraineth urine that paſſeth away too ſuddenly.

## DILL.

Description. THE common dill groweth up with ſeldom more than one ſtalk, neither ſo high, nor ſo great uſually, as fennel, being round, and with fewer joints thereon; whoſe leaves are ſadder, and ſomewhat long, and ſo like fennel that it deceiveth many, but harder in handling, and ſomewhat thicker, and of a ſtronger unpleaſant ſmell; the tops of the ſtalks have four branches, and ſmaller umbels of yellow flowers, which turn into ſmall ſeed ſomewhat flatter and thinner than fennel ſeed. The root is ſomewhat ſmall and woody, periſhing every year after it hath borne ſeed; and is alſo unprofitable, being never put to any uſe.

PLACE. It is moſt uſually ſown in gardens, and grounds for that purpoſe, and is alſo found wild with us in ſome places.

GOVERNMENT AND VIRTUES. Mercury hath the dominion of the plant, and therefore to be ſure it ſtrengthens the brain. The dill being boiled, and drunk, is good to eaſe ſwellings and pains; it alſo ſtayeth the belly and ſtomach from caſting; the decoction thereof helpeth women that are troubled with the pains and windineſs of the mother, if they ſit therein. It ſtayeth the hiccough, being boiled in wine, and only ſmelled unto, being tied in a cloth. The ſeed is of more uſe than the leaves, and more effectual to digeſt raw and viſcous humours, and is uſed in medicines that ſerve to expel wind, and the pains proceeding therefrom. The ſeed being toaſted or fried, and uſed in oils and plaiſters, diſſolveth impoſthumes in the fundament, and drieth up all moiſt ulcers, eſpecially in the ſecret parts. The oil made of dill is effectual to warm, to diſſolve humours and impoſthumes, to eaſe pains, and to procure reſt. The decoction of dill, be it herb or ſeed, (only if you boil the ſeed, you muſt bruiſe it,) in white wine, being drunk, is an excellent remedy to expel wind, and alſo to provoke the terms.

## DEVIL's BIT.

DESCRIPTION. THIS riſeth up with a round, green, ſmooth, ſtalk, about two feet high, ſet with divers long and ſomewhat narrow, ſmooth, dark-green, leaves, ſomewhat ſnipt about the edges, for the moſt part; being elſe all whole, and not divided at all, or but very ſeldom, even to the tops of the branches, which yet are ſmaller than thoſe below, with one rib only in the middle; at the end of each branch ſtandeth a round head of many flowers ſet together in the ſame manner, or more neatly than the ſcabious, and of a more bluiſh purple colour; which being paſt, there followeth ſeed that falleth away. The root is ſomewhat thick, but ſhort and blackiſh, with many ſtrings, abiding after ſeed-time many years. There are two other ſorts hereof, in nothing unlike the former, ſave that one beareth white, and the other bluſh-coloured, flowers.

PLACE. The firſt groweth as well in dry meadows and fields, as moiſt, in many places of this land; but the other two are more rare and hard to meet with; yet both are found growing wild about Appledore, near Rye, in Kent.

TIME. They flower uſually about Auguſt, and the ſeed is ripe in September.

GOVERNMENT AND VIRTUES. The plant is venereal, pleaſing, and harmleſs. The herb or root, being boiled in wine and drunk, is very powerful againſt the plague, and all peſtilential diſeaſes or fevers, poiſons alſo, and the bitings of venomous beaſts; it alſo helpeth thoſe that are inwardly bruiſed by any caſualty, or outwardly by falls or blows, diſſolving the clotted blood; and the herb or root beaten and outwardly applied, taketh away the black and blue marks that remain in the ſkin. The decoction of the herb, with honey of roſes put therein, is very effectual to help the inveterate tumours and ſwellings of the almonds and throat, by often gargling the mouth therewith. It helpeth alſo to procure women's courſes, and eaſeth all pains of the mother, and to break and diſcuſs wind therein, and in the bowels. The powder of the root taken in drink driveth forth the worms in the body. The juice or diſtilled water of the herb is effectual for green wounds, or old ſores, and cleanſeth the body inwardly; and the ſeed outwardly frees it from ſores, ſcurf, itch, pimples, freckles, morphew, eſpecially if a little vitriol be diſſolved therein.

## DOCK.

MANY kinds of theſe are ſo well known, that I ſhall not trouble you with a deſcription of them.

GOVERNMENT AND VIRTUES. All docks are under Jupiter; of which the red dock, commonly called bloodwort, cleanſeth the blood and ſtrengthens the liver; but the yellow dock root is beſt to be taken when either the blood or liver is afflicted by choler. All of them have a kind of cooling (but not alike) drying quality, the ſorrel being moſt cold; and the bloodworts moſt drying: of the burdock I have ſpoken already by itſelf. The ſeed of moſt of the kinds, whether of the garden or field, do ſtay laſks or fluxes of all ſorts; the loathings of the ſtomach though choler, and is helpful to thoſe who ſpit blood. The roots, boiled in vinegar, help the itch, ſcabs, and breaking out of the ſkin, if bathed therewith. The diſtilled water of the herb and root hath the ſame virtue, and cleanſeth the ſkin of freckles, morphews, and all other ſpots and diſcolouring therein.

All docks, being boiled with meat, make it boil the ſooner; beſides, bloodwort is exceeding ſtrengthening to the liver, and procures good blood, being as wholeſome a pot-herb as any that grows in a garden.

## DODDER OF THYME.

CALLED alſo epithimum, or other dodders.

DESCRIPTION. This firſt from ſeed giveth roots in the ground, which ſhoot forth threads or ſtrings, groſſer or finer, according to the property of the plant whereto to it belongeth, as alſo the climate; creeping and ſpreading on whatever it happens to faſten. Theſe ſtrings have no leaves at all upon them, but wind and entwine themſelves ſo thick that it not only taketh away all comfort of the ſun, but is ready to choak or ſtrangle whatever plant it chanceth to cleave to. After theſe ſtrings are riſen to that height that they may draw nouriſhment from the plant, they ſeem to be broken off from the ground, either by the ſtrength of their riſing, or withered by the heat of the ſun; upon theſe ſtrings are found cluſters of ſmall heads or huſks, out of which come whitiſh flowers, which afterwards give ſmall pale-coloured ſeed, ſomewhat flat, and twice as big as poppy-ſeed. It generally participates of the nature of the plant which it climbeth upon; but the dodder of thyme is accounted the beſt, and is the only true epithimum.

Government and Virtues. All dodders are under Saturn. The dodder which grows upon thyme is generally much hotter than that which grows upon colder herbs, for it draws nouriſhment from what it grows upon, as well as from the earth where its root is. This is accounted the moſt effectual for melancholic diſeaſes, and to purge black or burnt choler, which is the cauſe of many diſeaſes of the head and brain, as alſo for the trembling of the heart, faintings, and ſwoonings, and is helpful in all diſeaſes and griefs of the ſpleen; and that of melancholy, ariſing from the windineſs of the hypochondria. It purgeth alſo the reins or kidneys by urine; it openeth the obſtructions of the gall, whereby it profiteth thoſe who have the jaundice, as alſo the liver and ſpleen; it purgeth the veins of choleric and phlegmatic humours, and helpeth children's agues, a little wormſeed being put thereto.

The other dodders (as I obſerved before) participate of the nature of thoſe plants whereon they grow, as that which hath been found growing upon nettles in the Weſt-country hath by experience been found very effectual to procure plenty of urine, when it hath been ſtopped or hindered; and ſo of the reſt.

## DOG's GRASS.

KNOWN alſo by the name of quick-graſs or couch-graſs.

Description. It is well known that this graſs creepeth far about under ground with long, white, jointed, roots, having ſmall fibres at each joint, very ſweet in taſte, as the reſt of the herb is, and interlacing one another; from whence ſhoot forth many fair, long, graſſy, leaves, ſmall at the ends, and cutting or ſharp on the edges. The ſtalks are joined like corn, with the like leaves on them, and a long ſpiked head with a long huſk containing hard rough ſeed. If you know it not by this deſcription, watch a dog when he his ſick, and he will quickly lead you to it; for the inſtinct of theſe animals leads them to cure themſelves by eating of this kind of graſs.

Place. It groweth commonly in this kingdom, particularly in ploughed ground, being very troubleſome both to huſbandmen and gardeners to weed out of their grounds.

Government and Virtues. It is a gentle remedy under the dominion of Jupiter. This is the moſt medicinal of all the quick-graſſes: being boiled and drunk, it openeth obſtructions of the liver and gall, and the ſtoppings of the urine, and eaſeth the griping pains of the belly, and inflammations; waſteth the matter of the ſtone in the bladder, and alſo the ulcers thereof. The roots, bruiſed and applied, do conſolidate wounds. The ſeed doth moſt powerfully expel urine, and ſtayeth the laſk and vomiting. The diſtilled water alone, or with a little wormſeed, killeth worms in children.

The method of uſing it, is to bruiſe the roots, and, having well boiled them in white wine, to drink the decoction: it is opening, but not very ſafe in purging: and it is a remedy againſt all diſeaſes ariſing from ſtoppages of the body.

## DOVE's FOOT.

CALLED alſo crane's bill.

Description. This hath divers ſmall, round, pale green, leaves, cut in about the edges, much like mallows, ſtanding upon long reddiſh hairy ſtalks, lying in a round compaſs upon the ground; among which riſe up two or three, or more, reddiſh, jointed, ſlender, weak, and hairy, ſtalks, with ſome ſuch-like leaves thereon, but ſmaller, and deeper cut toward the tops, where grow many very ſmall, bright, red flowers of five leaves each; after which come ſmall heads, with ſmall ſhort beaks pointing forth, as alſo other ſorts of theſe herbs do.

Place. It groweth in paſture grounds, and by the path-ſides in many places, and is ſometimes found growing in gardens.

Time. It flowereth in June, July, and Auguſt, ſometimes earlier and ſometimes later, and the ſeed is ripe quickly after.

Government and Virtues. It is very gentle, though a martial plant. It has been found by experience to be ſingularly good for the wind-cholic, and pains thereof; as alſo to expel the ſtone and gravel in the kidneys. The decoction thereof in wine is an excellent good wound-drink for thoſe who have inward wounds, hurts, or bruiſes, both to ſtay the bleeding, to diſſolve and expel the congealed blood, and to heal the parts; as alſo to cleanſe and heal outward ſores, ulcers, and fiſtulas; green wounds are likewiſe quickly healed by bruiſing the herb, and applying it to the part affected. The ſame decoction in wine, fomented to any place pained with the gout, or to any joint-achs or pain of the ſinews, giveth great eaſe. The powder or decoction of the herb, taken for ſome time together, will prove exceedingly efficacious in the cure of ruptures and burſtings, either in young or old.

## DUCK's MEAT.

THIS is ſo well known to ſwim on the top of ſtanding waters, as ponds, pools, ditches, &c. that it is needleſs further to deſcribe it.

Government and Virtues. Cancer claims the herb, and the Moon is the lady of it. It is effectual to help inflammations and St. Anthony's fire, as alſo the gout, either applied by itſelf or in a poultice with barley-meal. The diſtilled water hereof is held in high eſtimation for its virtues againſt all inward inflammations and peſtilent fevers; as alſo to help the redneſs of the eyes, the ſwellings of the ſcrotum, and of the breaſts before they are grown too much. The freſh herb, applied to the forehead, eaſeth the pains of the head-ach coming of heat.

## DOWN, OR COTTON-THISTLE.

Description. THIS hath many large leaves lying on the ground, ſomewhat cut in, and as it were crumpled, on the edges; of a green colour on the upper ſide, but covered with long hairy wool, or cottony down, ſet with very ſharp and piercing prickles; from the middle of its heads of flowers come forth many purpliſh or crimſon threads, and ſometimes (though but very ſeldom) white ones. The ſeed that followeth in the heads, lying in a great deal of fine white down, is ſomewhat large, long, and round, like the ſeed of lady's thiſtle, but ſomewhat paler. The root is large and thick, ſpreading much, and uſually dies after-ſeed time.

Place. It groweth on divers ditches, banks, and in corn-fields, and highways, in almoſt every part of this kingdom.

Time. It floweth and beareth ſeed about the end of ſummer, at the time of the flowering and ſeeding of other thiſtles.

Government and Virtues. Mars owns this plant. Pliny and Dioſcorides write, that the leaves and roots hereof, taken in drink, help thoſe who have a crick in the neck. Galen ſaith, that the root and leaves of this plant are of an heating quality, and good for ſuch perſons as have their bodies drawn together by ſpaſms or convulſions, as alſo for children that have the rickets.

## DRAGONS.

THEY are ſo well known in this kingdom, that they require no deſcription; though we may juſt obſerve, for the benefit of ſuch as are now perfectly acquainted with this plant, that they cannot miſtake it if they take notice of the root, which very much reſembles a ſnake.

Government and Virtues. The plant is under the dominion of Mars, and is not without its obnoxious qualities. To uſe herbs of this deſcription, the ſafeſt way is to preſs out the juice and diſtil it in a glaſs-ſtill in ſand; it ſcoureth and cleanſeth the internal as well as external parts of the body exceedingly; it cleanſeth the ſkin from freckles, morphew, and ſun-burning; the beſt way to uſe it externally is to mix it with vinegar; an ointment of it is very good to heal wounds and ulcers; it conſumes cankers, and that fleſh growing in the noſtrils called polypus. The diſtilled water, being dropped in the eyes, takes away ſpots and blemiſhes, as alſo the pin and web, and cures dimneſs of ſight; it is excellent good againſt the peſtilence and poiſon. Pliny and Dioſcorides affirm, that no ſerpent will approach any perſon carrying this herb about them.

## DUNCH-DOWN.

Names. IT is called dunch-down, becauſe, if the down thereof happens to get into the ears, it cauſeth deafneſs. It is called in Latin *typha paluſtris*, in Engliſh reed-mace and water-torch; the leaves of it are called mat-weed, becauſe mats are made therewith.

Description. This herb hath long, rough, thick, and almoſt three-ſquare, leaves, filled within with a ſoft pith or marrow; among the leaves ſometimes groweth up a long, ſmooth, naked, ſtalk, without knots or joints, not hollow within, having at the top a grey or ruſſet long knap or ear, which is round, ſoft, thick, and ſmooth, and ſeemeth to be nothing elſe but a thrum of ruſſet wool or flocks, ſet thick and thronged together; which, as it ripeneth, is turned into down, and carried away with the wind. This down or cotton is ſo fine, that in ſome countries they fill cuſhions and beds with it. The roots are hard, thick, and white, with many threads hanging athwart each other; and, when theſe roots are dry, they ſerve for little elſe than firing.

## DWARF PLANE-TREE.

IN Latin this tree is called *platanus orientalis vera.*

Government and Virtues. The tender leaves boiled in wine, and uſed in the manner of an ointment, ſtop fluxions of the eyes; the bark boiled in vinegar, is uſed for pains of the teeth; but its uſe in phyſic is now become obſolete.

## DOUBLE-TONGUE.

Kinds and Names. THERE are found two kinds hereof; it is called double-tongue, horſe-tongue, and laurel of Alexandria.

Description. Double-tongue hath round ſtalks, like thoſe of Solomon's ſeal, about a foot and a half high, upon each ſide whereof grow thick browniſh leaves, not much unlike bay-leaves, upon which there groweth, in the middle of every leaf, another ſmall leaf, faſhioned like a tongue; and betwixt the ſmall and large leaves there grow round red berries, as big as a pea; the root is tender, white, long, and of a pleaſant ſmell.

There is alſo another kind of double-tongue, which alſo bringeth forth its fruit upon the leaves, and is like the firſt in ſtalks, leaves, fruit, and roots, except that the great leaves and berries grow alone, without the addition of the ſmall leaf.

Place. It groweth in Hungary and Auſtria, and in the woods and foreſts in Italy; but is ſcarcely ever ſeen in England, unleſs planted for curioſity.

Time. The ſeed of this herb is generally ripe in September.

Government and Virtues. Double-tongue is an herb of Venus. The leaves and roots thereof are much eſteemed for aſſuaging ſwellings of the throat, uvula, and kernels under the tongue; as alſo againſt the ulcers and ſores of the ſame, being taken as a gargle. Marcellus obſerves, that in Italy they hang this herb about the children's necks, that are ſick in the uvula; and Dioſcorides affirms, that, if it be worn upon the bare head, it is good for the head-ach. This herb is good for the diſeaſes of the mother, and a ſpoonful of the decoction of the leaves taken cauſeth the ſtrangled matrix to deſcend down to its natural place.

The root of laurel of Alexandria, boiled in wine and drunk, helpeth the ſtranguary, provoketh the urine and women's natural ſickneſs, procures eaſy delivery, expelleth the ſecundine, and all corruptions of the matrix.

## WHITE DAFFODIL.

Names. IT is called narciſſus, and primroſe-pearls.

Place. There are ſeveral kinds hereof, one with a crimſon or red purple circle in the middle of the flower, and another having a yellow circle, reſembling a coronet, or cup, in the middle of the flower. There is another kind that is yellow in the middle, and another ſort which beareth double flowers.

Description. The firſt kind of daffodil, or narciſſus, hath ſmall narrow leaves like leek-blades, with a creſted, bare, naked, ſtalk, without leaves, of a foot or nine inches long, with a flower at the top, growing out of a certain film or ſkin, generally growing ſingly, or alone, though ſometimes two together, conſiſting of ſix little white leaves; in the middle whereof is a ſmall round wrinkled hoop or cup, bordered about the brim with a certain round edge, wherein are contained ſeveral ſmall threads or ſtems, with yellowiſh tips hanging thereon; after the flowers appear angled huſks, wherein grow black ſeeds; the root is round and bulbous, not much unlike an onion.

The other narciſſus, with the yellow cup or circle in the middle, has blades longer and broader, and not ſo green as thoſe of the firſt; the ſtalks are longer and thicker, and upon every one of them ſtandeth three or four flowers like unto the firſt, except that they are yellow in the middle.

There is another kind that is yellow in the middle, and bears many more flowers, which are ſmaller than thoſe before deſcribed.

Place. The two firſt kinds grow plentifully in many places of France, as Burgundy, Languedoc, &c. in meadows and paſtures; but in this country they grow only in gardens where they are planted.

Time. They flower chiefly in March and April, though ſome of them bloom not until the beginning of May.

Temperature and Virtues. Venus challengeth the dominion over theſe plants. The root of it is hot and dry in the third degree; the which root, being boiled or roaſted, or taken in meat or drink, provoketh the ſtomach to vomiting; the ſame pounded with a little honey is good to be applied to burnings or ſcaldings, and cureth ſinews that are hurt or ſprained, and is good to help diſlocations, or members out of joint, being applied thereto; it alſo giveth eaſe in all old griefs and pains of the joints. The roots of narciſſus take away all ſpots of the face, being mingled with nettle-ſeed and vinegar, and applied. It mundifieth and cleanſeth corrupt and rotten ulcers, and ripeneth and breaketh hard impoſthumes, if it be mixed with the meal of vetches and honey, and uſed in the manner of a poultice; and, being mixed with the meal of juray and honey, it draweth forth thorns and ſplinters.

## YELLOW DAFFODIL.

Names. THIS kind of daffodil is alſo called lide-lily, becauſe it flowereth in March, which month in ſome countries is called Lide, and they are likewiſe known by the name of daffydown-dillies.

Description. It hath long, narrow, green, leaves; the ſtalks are round, upon which grow yellow flowers, of an unpleaſant ſmell; after which come round knobs or huſks, like little heads, wherein the ſeed is contained; it hath abundance of roots, which grow thick together, and encreaſe by new ſprigs and blades, whereby it ſpreadeth and increaſeth itſelf under ground, ſo that the increaſe of this plant is very rapid.

Place. It doth not grow naturally in this country, but in gardens where it is planted.

Time. Daffodils flower in March and April, and the ſeed ripens ſoon after.

Government and Virtues. Yellow daffodils are under the dominion of Mars, and the roots hereof are hot and dry almoſt in the third degree. The roots, boiled and taken in poſſet-drink, cauſe vomiting, and are uſed with good ſucceſs at the appearance of approaching agues, eſpecially the tertian ague, which is frequently caught in the ſpring time. A plaſter made of the roots, with parched barley-meal, diſſolves hard ſwellings and impoſthumes, being applied thereto; the juice, mingled with honey, frankincenſe, wine, and myrrh, and dropped into the ears, is good againſt the corrupt filth and running matter of the ears; the roots, made hollow, and boiled in oil, help raw kibed heels; the juice of the root is good for the morphew, and the diſcolourings of the ſkin.

## DATE-TREE.

Names. THIS is likewiſe called palm-tree, and the fruit is called dates, or fruit of the palm-tree.

Description. It groweth to be a large tree, with a ſtraight thick trunk, covered with a ſcaly bark; at the top whereof grow many long branches, bearing a vaſt number of long, ſtraight, narrow, leaves, or twigs like reeds, ſo that the whole tree appears to be nothing but a bundle of reed-leaves; amongſt the branches groweth the fruit, cluſtering together at the firſt, and wrapped in a certain long and broad covering, like a pillow, which afterwards openeth and ſheweth the fruit ſtanding along on certain ſmall ſprigs, growing out of a flat yellow branch; the fruit is long and round, containing within it a long and hard ſtone. Of this tree there are two kinds, the male and female; the male tree bringeth forth flowers only, which vaniſh away as ſoon as the bloſſom is full; and the female beareth the fruit, and bringeth it to perfection and ripeneſs.

Place. The date-tree groweth in Africa, Arabia, India, Syria, Judæa, and other eaſtern countries.

Time. It continueth always green, and beareth its flowers in the ſpring. In hot countries the fruit is ripe in autumn.

Government and Virtues. The branches and leaves are cold and aſtringent, the fruit is alſo ſomewhat aſtringent, but hot and dry almoſt in the ſecond degree; eſpecially before it is thoroughly ripe. Dates are hard of digeſtion, and cauſe oppilations in the liver and ſpleen; they engender windineſs, head-ach, and groſs blood, if eaten green and freſh; but, being quite ripe, they are not ſo hurtful, but nouriſh indifferently, being well digeſted in a good ſtomach. Dry dates ſtop looſeneſs and ſtay vomiting and ſick qualms of the ſtomach, eſpecially of women with child, if they are eaten; as alſo mingled with other proper medicines, and applied as a plaiſter to the ſtomach. Being adminiſtered inwardly or applied outwardly with medicines convenient, they ſtrengthen the weakneſs of the liver and ſpleen. The leaves and branches are good to heal green wounds, and refreſh and cool hot inflammations. There is a direction in the plaiſter *diacalcitheos*, that it be ſtirred with a ſtick of the palm-tree, that it might be of the more virtue and efficacy, from whence alſo the ſame plaiſter is called *diapalma*.

## DICTAMNUM OF CANDY.

Kinds and Names. IT is obſerved by Dioſcorides, that there are three kinds hereof; the firſt whereof is the right dictamnum, the ſecond is the baſtard dictamnum, and the third is another kind, bearing both flowers and ſeed; it is called alſo dittany of Crete, and in the ſhops *diptanum*.

Description. The firſt kind, which is the right dictamnum, is a hot and ſharp plant, much reſembling penny-royal, except that this hath larger leaves, ſomewhat hoary or moſſy, with a certain fine down, or woolly white cotton; at the top of the ſtalks or branches grow certain ſmall ſpiky tufts, hanging by ſmall ſtems, greater and thicker than the ears or ſpiky tufts of wild marjoram, and are ſomewhat of a red colour, in which there grow ſmall flowers.

The ſecond kind, called baſtard dictamnum, is very much like the firſt, except in taſte; it does not bite or hurt the tongue, as does the former, neither is it ſo hot. It hath round, ſoft, woolly ſtalks, with knots and joints, at each of which joints there ſtand two leaves ſomewhat round, ſoft, and woolly, not much unlike the leaves of penny-royal, but that they are larger, all hoary and white, ſoft an woolly, without any ſmell, but bitter in taſte; the flowers are of a light blue, compaſſing the ſtalk, at certain ſpaces like garlands, and like the flowers of penny-royal and hoarhound; the root is of a woody ſubſtance.

The third kind is like the ſecond in figure, ſaving that its leaves are greener and more hoary; covered with a fine, white, ſoft, hair, almoſt like the leaves of water-mint; the whole plant hath a good and pleaſant ſmell, as it were betwixt the ſcent of water-mint and ſage, as ſaith Dioſcorides.

Place. The firſt kind, or the right dictamnum, cometh from Crete, now called Candia, an iſland in the Mediterranean ſea, formerly belonging to the Venetians, but now in poſſeſſion of the Turks.

The other two kinds are not confined to Candia only, but grow alſo in many other hot countries.

Government and Virtues. The right dictamnum is hot and dry, and of ſubtil parts; the other two kinds are alſo hot and dry, but not quite ſo hot as the firſt;

they are all under Venus. The right dictamnum is of the ſame virtue as penny-royal, but much ſtronger and better. It bringeth down the courſes, afterbirth, and dead child, either taken in meat or drink, or uſed as a peſſary or mother-ſuppoſitory. The ſame virtue hath the root, which is hot and ſharp upon the tongue; the juice is very good to be drunk againſt all venoms, and the bitings of venomous beaſts and ſerpents. Dictamnum is of ſuch force againſt poiſon, that the ſavour or ſmell thereof driveth away all venomous beaſts or ſerpents; the juice of the ſame is of ſingular efficacy againſt all kinds of wounds, if dropped or poured therein; it both mundifieth, cleanſeth, and healeth, the ſame; it qualifieth and aſſuageth the pain of the milt and ſpleen, and waſteth and diminiſheth it, being either taken inwardly or applied outwardly to the place; it draweth forth ſplinters and thorns if it be bruiſed, and laid upon the affected part.

The baſtard dictamnum hath the ſame virtues as the firſt, though not quite ſo powerful in its operations.

The third kind is very profitable, compounded with medicines, drinks, and plaiſters, againſt the bitings or ſtingings of venomous beaſts.

## FALSE DICTAMNUM.

Names. THIS herb is called in Latin *tragium*, and by ſome *fraxinella*; ſome apothecaries do uſe the root hereof inſtead of the right dictamnum, from whence it is called baſtard or falſe dictamnum.

Description. This plant ſomewhat reſembles *lentiſms* or *licoras*, both in leaves and branches; it hath round, blackiſh, rough ſtalks, bearing on the tops thereof fair flowers, of a bluiſh colour, which on the upper part have four or five leaves, and on the lower part it hath ſmall long threads, crooking or hanging down almoſt like a beard. After the flowers are gone, in the place of each come four or five cods, ſomewhat rough without, ſlippery or ſlimy in handling, and of a ſtrong ſmell, not unlike that of a goat; in which is contained a black, plain, ſhining ſeed. The roots are long and white, ſometimes as thick as one's finger, and generally grow one againſt the other.

Place. It groweth in the iſle of Candia, and is ſometimes found in the gardens of curious botaniſts.

Time. It flowereth in June and July.

Government and Virtues. This plant is alſo under the dominion of Venus. It is hot almoſt in the third degree, and of ſubtil parts; the ſeed, taken to the quantity of a drachm, is good againſt the ſtranguary; it provoketh urine, it is good againſt the ſtone in the bladder, breaking and bringing it forth, and bringeth down the terms of women; the leaves and juice taken after the ſame manner have ſimilar virtues, and, being externally applied, draw out thorns and ſplinters; the root taken with a little rhubarb, killeth and driveth forth worms, and is of ſingular excellence againſt their return.

Dioſcorides obſerves of this plant, as alſo of the former, that it is natural to wild goats, when they are ſtruck with darts or arrows, to eat of this herb, which cauſeth them to fall out of their bodies; on which account it is not improbable that this herb came firſt to be ſubſtituted for the right dictamnum.

## ELM-TREE.

THIS tree is ſo well known, growing generally in moſt counties of this kingdom, that it would be needleſs to deſcribe it.

Government and Virtues. It is a cold and Saturnine plant. The leaves hereof, bruiſed and applied, heal green wounds, being bound thereon with its own bark; the leaves, or the bark, uſed with vinegar, effectually cure the ſcurf and leproſy; the decoction of the leaves, bark, or root, healeth broken bones by bathing the part affected therewith; the water that is found in the bladders on the leaves, while it is freſh, is a good waſh for cleanſing the ſkin, and making it fair; and if cloths are often wet therein, and applied to the ruptures of children, it helpeth them, if they are afterwards well bound up with a truſs; the ſaid water being cloſe ſtopped in a glaſs veſſel, and ſet either into the earth or dung for twenty-five days, ſetting the bottom thereof on a lay of common ſalt, ſo that the fæces may ſettle, and the water become very clear, is a ſingular and ſovereign balſam for green wounds, being uſed with ſoft tents: the decoction of the bark of the root mollifieth hard tumours, and the ſhrinking of the ſinews, being fomented therewith; the roots of the elm boiled for ſome conſiderable time in water, the fat riſing on the ſurface being nicely taken off, will prove an excellent reſtorative of fallen hair, the bald places being with it annointed; the bark ground with brine or pickle, until it cometh to the thickneſs of a poultice, and laid on the place pained with the gout, giveth great eaſe; and the decoction of the bark in water is exceeding good to bathe ſuch places as have been burned with fire.

## ENDIVE.

Description. COMMON garden endive beareth a longer and larger leaf than ſuccory, and abideth but one year, quickly running up to ſtalk and ſeed, and then periſhing; it hath blue flowers, and the ſeed is ſo much like that of ſuccory, it is hard to diſtinguiſh them.

Government and Virtues. It is a fine, cooling, cleanſing, plant; the decoction of the leaves, or the juice, or the diſtilled water, of endive, ſerveth well to cool the exceſſive heat of the liver and ſtomach, as alſo the hot fits of agues, and all other inflammations; it cooleth the heat and ſharpneſs of the urine, and the excoriations in the uritory parts: the ſeed have the ſame properties, though rather more powerful, and beſides are available for faintings, ſwoonings, and the paſſions of the heart. Outwardly applied, they ſerve to temper the ſharp humours of fretting ulcers, hot tumours and ſwellings, and peſtilential ſores; it wonderfully helpeth not only the redneſs and inflammation of the eyes, but the dimneſs of the ſight alſo; they are likewiſe uſed to allay the pains of the gout; in fact it cannot be uſed amiſs. The ſyrup of it is a fine cooling medicine for fevers.

## ELECAMPANE.

Description. THIS ſhooteth forth many large leaves, long and broad, lying near the ground, ſmall at both ends, ſomewhat ſoft in handling, of a whitiſh green on the upper ſide and grey underneath, each ſet upon a ſhort footſtalk; from among theſe riſe up divers great and ſtrong hairy ſtalks, three or four feet high, with ſome leaves thereon, compaſſing them about at the lower ends, and are branched toward the tops, bearing ſeveral large flowers, like thoſe of the corn marygold, both the border of the leaves and the middle thrumb being yellow; this is followed by a down, with long, ſmall, browniſh, ſeed among it, which is carried away with the wind. The root is large and thick, branching forth many ways, blackiſh on the outſide, and white within, of a very bitter taſte, and ſtrong but pleaſant ſmell, eſpecially when they are dried; it is the only part of the plant which has any ſmell.

Place. It groweth in moiſt grounds and ſhadowy places oftener than in the dry and open borders of fields and lanes, and other waſte places, almoſt in every county of this kingdom.

Time. It flowereth in June and July, and the ſeed is ripe in Auguſt. The roots are gathered for medicinal purpoſes, as well in the ſpring, before the leaves come forth, as in autumn or winter.

Government and Virtues. It is a plant under the dominion of Mercury. The freſh roots of elecampane preſerved with ſugar, or made into a ſyrup, or conſerve, is very good to warm a cold and windy ſtomach, or the pricking therein, and ſtitches in the ſides, cauſed by the ſpleen; alſo to help a cough, ſhortneſs of breath, and wheezing in the lungs. The dry root made into powder, and mixed with ſugar and taken, anſwereth the ſame purpoſes, and is alſo profitable to thoſe who have their urine ſtopped; likewiſe to prevent the ſtoppages of the menſtrua, the pains of the mother, and of the ſtone in the reins, kidneys, or bladder; it reſiſteth poiſon, and ſtayeth the ſpreading of the venom of ſerpents, as alſo of putrid and peſtilential fevers, and alſo the plague. The roots and herbage beaten and put into new ale or beer, and drunk daily, clear, ſtrengthen, and quicken, the ſight of the eyes exceedingly. The decoction of the roots in wine, or the juice taken therein, killeth and driveth forth all manner of worms in the belly and ſtomach; if gargled in the mouth, or the root chewed, faſteneth looſe teeth, and helpeth to keep them from putrefaction; being drunk, it is good for thoſe who ſpit blood, helpeth to remove cramps or convulſions, the pains of the gout, the ſciatica, the looſeneſs and pains in the joints, or members disjointed or ſprained, proceeding from colds or moiſture happening to them, applied either internally or externally; it is alſo uſed with good effect by thoſe who are burſten, or have an inward bruiſe. The roots being well boiled in vinegar, afterwards beaten and made into an ointment with hog's ſuet and oil of trotters, is an excellent remedy for the ſcab or itch, either in young or old; the places alſo bathed or waſhed with the decoction doth the ſame, and helpeth all ſorts of filthy, old, putrid, ſores or cankers. In the root of this herb lieth the chief effect for all the remedies aforeſaid. The diſtilled water of the leaves and roots together is very profitable to cleanſe the ſkin from morphew, ſpots, or blemiſhes.

## ERINGO.

KNOWN alſo by the name of ſea-holly.

Description. The leaves of this plant are nearly round, deeply dented about the edges, hard, and ſharp pointed, a little crumpled, and of a bluiſh-green colour, each having a long footſtalk; the leaves, when young, are neither ſo hard nor prickly as when come to its maturity. The ſtalk is round and ſtrong, ſomewhat creſted with joints, bearing leaves thereat, which are more divided, ſharp, and prickly, than thoſe before mentioned; from theſe joints it alſo branches forth many ways, each bearing on the top ſeveral bluiſh, round, prickly, heads, with many ſmall jagged, prickly, leaves under them, ſtanding like a ſtar, which are ſometimes of a greeniſh or white colour. The root groweth very long, ſometimes to the length of eight or ten feet, ſet with rings or circles toward the upper part, but ſmooth and without joints downwards, browniſh on the outſide, but very white within, with a pith in the middle, of a pleaſant taſte, but much more ſo when carefully preſerved and candied with ſugar.

Place. It is found on the ſea-coaſts, and in almoſt every part of this kingdom bordering on the ſea.

Time. It floweth at the latter end of the ſummer, and giveth its ſeed about a month after.

Government and Virtues. The plant is venereal, and produceth a great quantity of ſeed; it is hot and moiſt, and under the ſign Libra. The decoction of the root taken in wine is very effectual in opening the obſtructions of the ſpleen and liver. It helpeth the yellow jaundice, the dropſy, the pains in the loins, and wind cholic, provoketh urine, expelleth the ſtone, and procureth women's courſes. The decoction taken for fifteen days, on going to bed and in the morning faſting, helpeth the ſtranguary, the evacuation of the urine by drops, the ſtopping of urine, the ſtone, and all defects of the reins and kidneys, and by a longer continuance of the aforeſaid decoction great relief will be found againſt the French diſcaſe. The roots bruiſed, and externally applied, help the kernels of the throat, commonly called the king's evil; or taken inwardly, and applied to the place ſtung or bitten by a ſerpent, heal it ſpeedily. If the roots are bruiſed and boiled in hog's lard, they are good for drawing forth thorns, ſplinters, &c. and cloſing the inciſion made thereby. The juice of the leaves dropped into the ears, helpeth impoſthumes therein; the diſtilled water of the whole herb, when the leaves and ſtalks are young, may be drunk with good ſucceſs for all the purpoſes aforeſaid.

## EYE-BRIGHT.

Description. COMMON eye-bright is a ſmall low herb, riſing up uſally with but one blackiſh green ſtalk, about a ſpan high, ſpread from the bottom into ſundry branches, whereon are ſet ſmall, and almoſt round, yet pointed, dark-green leaves; they are finely ſnipped about the edges, two always ſet together, and very thick; at the joints with the leaves, from the middle upwards, come forth ſmall white flowers, ſtriped with purple and yellow, after which follow ſmall round heads containing very ſmall ſeed; the root is long, ſmall, and thready at the end.

Place. It groweth in meadows and graſſy places.

Government and Virtues. It is under the ſign Virgo, and Sol claims the dominion over it. The juice of this herb, taken in white wine or broth, or dropped into the eyes for ſeveral days together, helpeth all the infirmities of them. Some make a conſerve of the flowers for the aforeſaid purpoſe. Being uſed either of theſe ways, it alſo helpeth a weak brain or memory. If tunned up with ſtrong beer that it may work together, and drunk; or the powder of the dried herb mixed with ſugar, a little mace, and fennel-ſeed, and drunk or taken in broth; or the ſaid powder taken as an electuary; each of theſe hath the ſame powerful effect to help and reſtore the loſs of ſight through age.

## ELDER-TREE.

I CONSIDER it needleſs to trouble my readers with a deſcription of this tree, ſince there is ſcarce a ſchool-boy but can point it out; ſhall therefore proceed to the

DWARF-

## DWARF-ELDER.

CALLED alſo dead-wort and wall-wort.

Description. This herb ſpringeth freſh from the ground every ſpring; its leaves and ſtalks periſhing at the approach of winter. It is like the common elder both in form and quality, riſing up with a ſquare, rough, hairy, ſtalk, about four feet high, though ſometimes higher: the winged leaves are ſomewhat narrower than of that aforementioned, but in other reſpects not unlike them; the flowers are white daſhed with purple, ſtanding in umbels, reſembling thoſe of the former except in ſmell, theſe being the moſt pleaſant; after the flowers come ſmall blackiſh berries, full of juice whilſt they are freſh, containing ſmall hard kernels, or ſeed. The root doth creep under the upper cruſt of the ground, ſpringing in divers places, and being in general about the ſize of a perſon's finger.

Place. It groweth wild in many parts of the kingdom, and is with difficulty erazed from the place where it once takes root.

Time. Moſt of the elder-trees flower in June, and their fruit is ripe in Auguſt; but the dwarf kind or wall-wort flowereth ſomewhat later, and its fruit is not ripe till September.

Government and Virtues. Both the common and dwarf elders are under the domininion of Venus. The firſt ſhoots of the common elder boiled like aſparagus, or the young leaves and ſtalks boiled in fat broth, expel phlegm and choler; the middle or inward bark boiled in water, and drunk, purgeth exceedingly; and the berries, either green or dry, are often given with good ſucceſs for the dropſy; the bark of the root boiled in wine, or the juice thereof drunk, hath the ſame virtue, though more powerful in its operations. The juice of the root doth ſtrongly provoke vomiting, and purgeth the watery humours of the dropſy. The decoction of the root cureth the biting of a mad dog, as alſo that of the adder; it mollifieth the hardneſs of the mother, and bringeth down the courſes; the berries boiled in wine perform the ſame effect, and the hair of the head waſhed therewith is made black. The juice of the green leaves applied to the hot inflammations of the eyes aſſuageth them, and, being ſnuffed up the noſtrils, purgeth the tunicles of the brain. The juice of the berries boiled with honey, and dropped into the ears, cureth the pains thereof; by drinking a decoction of the berries in wine, urine is provoked; the diſtilled water of the flowers is very ſerviceable for cleanſing the ſkin from ſun-burning, freckles, morphews, &c. It cureth the head-ach by waſhing it therewith, and, being uſed as a bath, it is a certain cure for ulcerated legs; it removeth the redneſs of the eyes, and helpeth thoſe who are afflicted with the palſy.

The dwarf-elder is more powerful than the common in opening and purging choler, phlegm, and water; it helpeth the gout, piles, and the diſeaſes incident to women: it coloureth the hair black, helpeth the inflammations of the eyes, and pains of the ears, the biting of ſerpents or mad dogs, burnings and ſcaldings, the wind-cholic, the ſtone, the difficulty of urine, and the cure of old ſores and fiſtulous ulcers. Dr. Butler obſerves, that the decoction of elder is a moſt excellent relief for the dropſy.

## ERYSIMUM.

Description. This plant hath long leaves deeply cut or jagged on the edges, not much unlike the leaves of wild muſtard; the ſtalks are ſmall, ſlender, and pliant, and will twiſt and wind like the withy. Upon each of theſe ſtalks grow many yellow flowers; which are followed by long ſlender huſks, containing ſeed of a ſharp biting taſte; the root is very long and thick, with many ſmall ſtrings or threads hanging thereto.

Place. It delights in ſtony untilled places, and is to be found in moſt of the bye-paths and bank-ſides in this kingdom.

Time. It generally flowereth in the months of June and July, though their bloſſoms are ſometimes ſeen later in the year.

Government and Virtues. The ſeed of this plant taken with honey ripeneth and cauſeth the evacuation of tough and clammy phlegm; it is alſo good againſt ſhortneſs of breath, and is effectual in removing an old cough. If the ſeed be ſteeped in fair water and then dried by the fire, it is good for the gripings of the belly, and expelleth all venom and poiſon. An ointment made of the ſeed conſumeth and waſteth all hard ſwellings and impoſthumes behind the ears, as alſo cankers and ſwellings in the breaſts, genitals, &c.

## EGLANTINE.

THIS is the better known by its common name, ſweet brier, and is called in ſome counties wild brier, and pimpernel-roſe. The Latins call it *cynorrhodon*, and the Greeks *rodon agrion*. Another ſpecies of eglantine is the dog-roſe, and all other wild roſes.

Time and Place. The ſweet brier, from its fragrant and pleaſant ſmell, is cultivated in moſt gardens and pleaſure-grounds. It grows likewiſe wild in the borders of fields, and in woods, in almoſt every part of this kingdom; but not by far ſo plentifully as the dog-roſe. It begins to ſhoot forth its buds early in the ſpring, and flouriſheth and flowereth during the time of all the other roſe-trees.

Government and Virtues. Sweet briar is under the dominion of Jupiter, and the dog-roſe is under the Moon. The leaves of the flowers are not ſo efficacious in medicine as roſe-leaves, which, being alſo more abundant, are always uſed in preference. The ſpungy apples or balls which are found upon the eglantine, if pounded to a paſte, and mixed with honey and wood-aſhes, are an excellent remedy for the alopecia, or falling off of the hair; and, being dried and powdered, and taken in white wine, are good againſt the ſtone and gravel, removing the ſtranguary, and ſtrengthening the kidneys. The ſame boiled in a ſtrong decoction of the roots is good to heal the bitings of venomous beaſts or mad dogs. The red berries which ſucceed the flowers, called hips, if made into a conſerve, and eaten occaſionally, gently bind the belly, ſtop defluxions of the head and ſtomach, help digeſtion, ſharpen the appetite, and dry up the moiſture of cold rheum and phlegm upon the ſtomach. The powder of the dried pulp is an excellent remedy for the whites; and, if mixed with the powder of the balls, and given in ſmall quantities, is an excellent remedy for the cholic, and to deſtroy worms.

## EUPHORBIUM, OR GUM-THISTLE.

THIS plant is ſo well known, and ſo common in every part of this kingdom, that any deſcription of it would be altogether ſuperfluous.

Place. They grow in moſt fields and meadows throughout this kingdom, and particularly in grounds ſowed with corn.

Time. They flower from the beginning of June until the end of September; and the ſeed progreſſively ripens from the end of June to the beginning of November.

Government and Virtues. This plant is under the dominion of the planet Mars, and partakes more of his fiery nature than any of the other thiſtles. It is hot and dry in the fourth degree, being a perfect cauſtic, and of thin parts. A plaſter made of it, with twelve times as much oil, and a little wax, heals all achs of the joints, lameneſs, palſies, cramps, and ſhrinkings of the ſinews. Mixed with oil of bay and bear's greaſe, it healeth ſcurfs and ſcalds in the head, and reſtoreth loſt hair; applied with oil to the temples, it healeth the lethargy, and, by putting it to the nape of the neck, it preventeth the apoplexy. Being mixed with vinegar, it removeth all blemiſhes of the ſkin, or, with other ointments, it heateth the parts that are cold, and healeth the ſciatica. Taken inwardly, it fretteth the entrails and ſcorcheth the whole body, therefore muſt be beaten ſmall, and tempered with ſomething that lubrifieth and allayeth its heat and ſharpneſs, and then it purgeth water and phlegm. The remedy is *ant'euphorbium*, which is ſucculent, cold, and ſlimy. The pills of euphorbium greatly help dropſies, pains in the loins and guts, by moiſture. The ſimple oil of this plant hath the ſame virtues as that of caſtor, but is much ſtronger; if ſnuffed up the noſe, it purgeth the head of phlegm; it is alſo good in old and cold pains of the joints, liver, and ſpleen. It is good for cold diſeaſes of the nerves and brain, the head-ach, and pains in the ſide thereof; it cures the lethargy, being ſnuffed up the noſe; anointed on the privities, it provoketh luſt, and it healeth all numbneſs and ſtiffneſs proceeding from cold. *Oleum de euphorbio compoſitum*, or the compound oil of euphorbium, operates as the ſimple, but more effectually; it healeth old and cold diſeaſes of the nerves and brain, and prevents drowſineſs. It is very effectual in cold pains of the womb, kidneys, and bladder, being anointed on the regions thereof. The extract of euphorbium healeth the palſy, gout, ſpaſm, and dropſy, and bringeth phlegm from the nerves.

## FERN.

Description. OF this there are two kinds principally to be treated of; viz. the male and female. The female groweth higher than the male, but the leaves thereof are leſs, and more divided or dented, but of the ſame ſmell as that of the male. The virtues of each are the ſame.

Place. They grow on heaths and in ſhady places near the hedge-ſides in moſt parts of this kingdom.

Time. They flower and ſeed at midſummer.

Government and Virtues. It is under the dominion of Mercury, both the male and female. The roots of both theſe ſorts of ferns, being bruiſed and boiled in mead, or honey-water, and drunk, kill both the broad and long worms in the body, and abate the ſwelling and hardneſs of the ſpleen. The green leaves, eaten, purge the belly of choleric and wateriſh humours, but they trouble the ſtomach; they alſo cauſe abortion, conſequently are unfit for the uſe of pregnant women. The roots bruiſed, and boiled in oil or hog's lard, make a very profitable ointment to heal wounds, or draw forth thorns from the fleſh. The powder of them, uſed in foul ulcers, drieth up their malignant moiſture, and cauſeth their ſpeedy healing. Fern being burnt, the ſmoke thereof driveth away ſerpents, gnats, and other noiſome creatures, which in fenny countries are ſometimes very troubleſome.

## WATER-FERN.

IT is called alſo oſmond-royal.

Description. This ſhooteth forth in the ſpring time; it hath ſeveral rough hard ſtalks, half-round, or flattiſh on one ſide, and hollow; they are about two feet high, having many branches of winged yellowiſh-green leaves on all ſides, ſet one againſt another, longer, narrower, and not nicked on the edges; from the top of ſome of theſe ſtalks grow forth a long buſh of ſmall and more yellowiſh-green ſcaly aglets, ſet in the ſame manner on the ſtalks as the leaves are; theſe are ſuppoſed to be the flowers and ſeed. The root is rough, thick, and ſcaly, having a white pith in the middle, which is called the heart thereof.

Place. It groweth in moors, bogs, and watery places, in many parts of this kingdom.

Time. It is green all the ſummer, but the root liveth during the winter.

Government and Virtues. Saturn owns this plant. It hath all the virtues of the former ferns, though much more effectual in its operations than either, both for inward and outward griefs, and is a ſingular remedy for wounds, bruiſes, &c. The decoction drunk, or boiled down to an oil or ointment, and applied, is alſo good for bruiſes, and bones broken or disjointed; as alſo for ruptures and burſtings, and giveth much eaſe to the cholic and in ſplenetic diſeaſes. The decoction of the root, taken in white wine, provoketh urine exceedingly, and cleanſeth its paſſages. Of the aſhes of theſe ferns, with water, are made balls, (particularly in Warwickſhire and Staffordſhire,) with which, being dried in the ſun, they waſh their clothes inſtead of ſoap; but before they uſe them they put them into a light fire till they are red-hot, and then they will eaſily powder.---This fern alſo is uſed in Suſſex to burn lime, the flame being very fit for that purpoſe.---The juice of the root is good for burns.---The aſhes caſt upon ſtones, inſtead of nitre, make glaſs of a green colour.

## FEATHERFEW.

Description. COMMON featherfew hath many large, freſh, green, leaves, very much torn or cut on the edges; the ſtalks are hard and round, ſet with many ſuch-like leaves, but ſomewhat ſmaller; at the tops ſtand many ſingle flowers, each upon a ſmall footſtalk; they conſiſt of many ſmall white leaves, ſtanding round a yellow thrumb. The root is ſomewhat hard and ſhort, with many ſtrong fibres.---The ſmell of the whole plant is ſtrong; taſte bitter.

Place. There are ſome places in this kingdom where it grows wild; but it is generally a garden plant.

Time. It flowereth in the months of June and July.

Government and Virtues. This herb is governed by Venus. Being boiled in white wine, and the decoction drunk, it cleanſeth the womb, expelleth the after-birth, and is of general utility to the fair ſex. It is uſed for the diſeaſes of the mother, either in the riſing or ſtrangling of the ſame, or when attended with hardneſs or inflammation, being applied outwardly thereunto. A decoction of the flowers in wine, with a little nutmeg or mace therein, drunk ſeveral times a-day, is an approved provocative of women's courſes, as alſo a great help to expel the dead and after births; and to ſit over the hot fumes of the decoction of the herb, made in water or wine, will prove equally ſerviceable. The decoction, mixed with ſugar or honey, is good to help a cough, to cleanſe the cheſt or ſtomach of phlegm, and to expel the ſtone. The powder of the herb taken in wine, with ſome oxymel, purgeth both choler and phlegm, and is good for thoſe who are ſhort-winded, or are troubled with melancholy or lowneſs of ſpirits; it is effectual in removing all pains of the head ariſing from a cold, the herb being bruiſed, and applied to the crown thereof; uſed in the ſame manner, it is likewiſe good for the ſwimming or giddineſs of the head. The decoction thereof drunk warm, and the herb bruiſed with a few grains of bay-ſalt, and applied to the wriſts, will prevent the return of ague-fits. The diſtilled water taketh away freckles and other ſpots of the ſkin, and other blemiſhes in the face; the herb bruiſed, and heated on a tile, with ſome wine to moiſten it, or fried with a little oil and wine, and applied warm outwardly, helpeth the wind and cholic in the lower part of the belly. It is an eſpecial remedy againſt the too liberal uſe of opium.

## FENNEL.

EVERY garden affordeth this ſo plentifully, that it needeth no deſcription.

GOVERNMENT AND VIRTUES. It is governed by Mercury, under Virgo, and beareth antipathy to Piſces. It is exceeding good to be boiled with fiſh, as it conſumeth the phlegmatic humour ariſing therefrom. Fennel is good to break wind, provoke urine, and eaſe the pains of, as well as break, the ſtone. The leaves and ſeed boiled in barley-water, and drunk, are good to increaſe milk and make it more wholeſome. The leaves, or rather ſeed, boiled in water, will ſtay the hiccough, and take away the loathing which often happens to the ſtomach of ſick and feveriſh perſons, and allayeth the heat thereof; the ſeed, if it be boiled in wine, and drunk, is good for thoſe who are bitten by a ſerpent, or have eaten poiſonous herbs; the ſeed and root help to open obſtructions of the liver, ſpleen, and gall, and thereby remove the painful and windy ſwellings of the ſpleen, the yellow jaundice, and the gout and cramp; the ſeed is of great uſe in medicines given to help ſhortneſs of breath, and wheeſing by ſtoppage of the lungs; and it helpeth to bring down the courſes, and cleanſe the parts after delivery. The roots are good to be put into diet-drinks and broths that are taken to cleanſe the blood, to open obſtructions of the liver, to provoke the urine, to amend the ill colour of the face after ſickneſs, and to cauſe a good habit of the body. The diſtilled water of the whole herb, or the condenſate juice diſſolved, (but eſpecially the natural juice that iſſueth forth from this plant in hot countries) dropped into the eyes, cleanſeth them from miſt and film growing upon the ſight thereof. The ſweet fennel is much weaker in phyſical uſes than the common fennel, and the wild is ſtronger and hotter than the tame, and therefore more powerful againſt the ſtone, but not ſo effectual to increaſe milk becauſe of its dryneſs.

## SOW-FENNEL.

BESIDES the common Engliſh names of ſow-fennel, hogs-fennel, hoar-ſtrong, hoar-ſtrang, ſulphur-wort, and brimſtone-wort, it is called in Latin, *peuſidanum*.

Description. The common ſow-fennel hath many branched ſtalks of thick and ſomewhat long leaves, three of which generally grow together; the ſtalk is ſtraight and creſted, with joints thereon, ſomewhat leſs than the common fennel, and branching forth at the top ſeveral ſmall ſprays with tufts of yellow flowers, after which cometh flat, thin, and yellowiſh, ſeed, rather larger than that of the former. The root groweth great and deep, with many fibres hanging thereto, of a ſtrong ſmell, and yieldeth a yellowiſh clammy juice, almoſt like a gum.

Place. It groweth plentifully in the low ſalt marſhes near Feverſham in Kent.

Time. It flowereth and ſeedeth in July and Auguſt.

Government and Virtues. This alſo is an herb of Mercury. The juice of ſow-fennel uſed with vinegar and roſe-water, or the juice with a little euphorbium, put to the noſe, helpeth thoſe who are troubled with the lethargy, the frenzy, the turning or giddineſs of the head, the falling-ſickneſs, long and inveterate head-ach, the palſy, ſciatica, cramp, and in general all the diſeaſes of the ſinews, being mixed with oil and vinegar, and the affected parts bathed therewith. The juice diſſolved in wine, or put into an egg, is good for the cough, or ſhortneſs of breath, and to expel wind; it purgeth the belly gently, helpeth the hardneſs of the ſpleen, giveth eaſe to pregnant women, and eaſeth the pains of the reins, bladder, and womb. A little of the juice diſſolved in wine and dropped into the ears, eaſeth the pains thereof, or put into an hollow tooth, eaſeth the tooth-ach; the root is leſs effectual in all the aforeſaid diſeaſes, yet it is not without its virtues; the powder of it cleanſeth foul ulcers, draweth forth ſplinters of broken bones, drieth up old and inveterate running ſores, and is an excellent ſalve for green wounds.

## FIGWORT.

CALLED alſo throatwort.

Description. Common great figwort ſhooteth forth ſeveral great, ſtrong, hard, ſquare, brown ſtalks, three or four feet high, whereon grow large, hard, and dark-green, leaves, two on a joint, being larger and harder than the nettle leaves, but do not ſting; at the tops of the ſtalks ſtand many purple flowers, ſet in huſks, not unlike thoſe of water-betony, which are followed by round heads with a ſmall point in the middle, containing ſmall browniſh ſeed. The root is large, white, and thick, ſhooting forth many branches under the upper cruſt of the earth, which abideth many years, but the leaves periſh annuallly.

Place. It groweth frequently in moiſt and ſhady places, and in the bottoms of fields and meadows.

Time. It flowereth about July, and the ſeed ripens about a month after the flowers are fallen.

Government and Virtues. Venus claims dominion over this herb. It is an excellent remedy for the king's evil or any other diſeaſe in the neck; the decoction of the herb taken inwardly, and the bruiſed herb applied outwardly, diſſolveth clotted and concealed blood, coming from any wound, bruiſe, or fall, and is no leſs effectual in removing knots, kernels, bunches, and wens, growing in the fleſh; it is good alſo for the hemorrhoids, piles, or other knobs or kernels growing near the fundament. An ointment made hereof may be uſed for the above purpoſes when the freſh herb is not to be had. The diſtilled water of the whole plant, together with the root, may alſo be uſed for the aforeſaid diſorders; it drieth up the ſuperfluous virulent moiſture of hollow and corroding ulcers, and taketh away all redneſs, ſpots, and freckles in the face, as alſo the ſcurf and blotches therein, and is uſed with good effect to cure the body of the leproſy.

## FILIPENDULA.

IT is by ſome called dropwort.

Description. It ſhooteth forth many leaves of various ſizes, growing on each ſide of a rib, and much dented on the edges, ſomewhat reſembling wild tanſy or agrimony, but feel much harder; among theſe riſe up one or more ſtalks, two or three feet high, ſpreading itſelf into many other branches, each bearing ſeveral white ſweet-ſmelling flowers, conſiſting of five leaves apiece, with ſmall threads in the middle; they ſtand together in a tuft or umbel, each upon a ſmall footſtalk, and are ſucceeded by round chaffy heads like buttons, which contain the ſeed. The root conſiſts of many tuberous pieces, faſtened together by many ſmall, long, blackiſh ſtrings, which run from one to another.

Place. It groweth in many places of this kingdom, in the corners of dry fields and meadows, and alſo by hedge-ſides.

Time. They flower in June and July, and their ſeed is ripe in Auguſt.

Government and Virtues. It is under the dominion of Venus. It is very effectual to open the urinary paſſages, and to help the ſtranguary, and all other pains of the bladder and reins, and to expel the ſtone and gravel, by taking the root in powder, or a decoction of them in white wine, ſweetened with ſugar; the ſame alſo helpeth to expel the afterbirth. The roots made into powder, and mixed with honey, after the manner of an electuary, is good to be taken by thoſe whoſe ſtomachs are ſwollen, breaking and expelling the wind which was the cauſe thereof, as alſo for all diſeaſes of the lungs, as ſhortneſs of breath, wheezings, hoarſeneſs of the throat, and the cough, and to expectorate cold phlegm. It is called dropwort becauſe it giveth eaſe to thoſe who evacuate their water by drops.

## FIG-TREE.

FOR to give a deſcription of a tree ſo well known to almoſt every body who lives in this kingdom, were needleſs; ſhall therefore only obſerve, that it is much fitter for medicinal purpoſes than any other.

Government and Virtues. The tree is under the dominion of Jupiter. The milk that iſſueth from the leaves or branches when they are broken, being dropped upon warts, taketh them away; the decoction of the leaves is exceeding good to waſh ſore heads with, nor is there ſcarcely a better remedy for the leproſy than this; it alſo clears the face of the morphew, and the body of white ſcurf, moiſt ſcabs, and running ſores; if it be dropped into old fretting ulcers, it cleanſeth out the moiſture and cloſeth up the fleſh. For the ſake of convenience, an ointment may be made of the leaves whilſt they are green, which will keep all the winter. A decoction of the leaves taken inwardly, or rather the ſyrup of them, diſſolves congealed blood cauſed by falls or bruiſes, and is good for the bloody flux; the aſhes of the wood made into an ointment with hog's lard, cureth kibes and chilblains; the juice being put into a hollow tooth, eaſeth the tooth-ach, and dropped into the ears, cureth the deafneſs and pains thereof. An ointment of the juice and hog's greaſe, is an excellent remedy for the biting of a mad dog, or other venomous beaſts. A ſyrup of the green fruit is very good for coughs, hoarſeneſs, ſhortneſs of breath, and all diſeaſes of the breaſt and lungs; it is equally efficacious for the dropſy and falling ſickneſs. It is reported, but I cannot vouch for its veracity, that a bull, be he never ſo mad, by being tied to this tree, will quickly become tame and gentle.

## FLOWER-DE-LUCE.

IT alſo beareth the name of yellow-water-flag.

Description. There are other flower-de-luces, from which this herb differs chiefly in the leaves; thoſe of this plant are much longer and narrower, and of a ſad green colour; in other reſpects there is little or no difference. The leaves all grow together, from the middle of which riſeth the ſtalk, bearing on the top ſmall yellow flowers, with three falling leaves, and other three arched that cover their bottoms; but, inſtead of the three upright leaves which are in the other kinds, in this there is ſubſtituted three very ſhort leaves, which are followed by long triangled heads, each containing large and flattiſh ſeed. The root is long and ſlender, of a pale browniſh colour on the outſide, and of a hoar lightiſh colour within, having many hard fibres thereat, and of a harſh taſte.

Place. It uſually grows in watery ditches, ponds, lakes, and moor-ſides, which are filled with ſtanding or running water.

Time. It flowereth in July, and the ſeed is ripe in Auguſt.

Government and Virtues. It is under the dominion of the Moon. The root is of a very aſtringent, cooling, and drying, nature, and thereby helpeth all laſks and fluxes, whether of blood or humours, as bleeding at the mouth, noſe, or other parts, and the immoderate flooding of women's courſes. The diſtilled water of the whole herb, flowers, and roots, is a ſovereign remedy for weak eyes, being either dropped therein or cloths or ſponge wet therewith and applied to the forehead; being alſo fomented on ſwellings and hot inflammations and cankers incident to women's breaſts; alſo foul ulcers in the privy parts of either ſex. An ointment made of the flowers is better for theſe external applications.

## FLAXWEED.

CALLED likewiſe toad-flax.

Description. Our common flaxweed hath many ſtalks, thick ſet with long and narrow blue or aſh-coloured leaves, and bearing from the middle upward a vaſt number of pale yellow flowers, of a ſtrong unpleaſant ſmell, with deeper yellow mouths, and blackiſh flat ſeeds in round heads. The root is ſomewhat woody and white, eſpecially the chief branch of it, which ſpreadeth itſelf many ways, having ſeveral fibres hanging thereto.

Place. This groweth in every part of this kingdom, and is to be found by the way-ſides in meadows, banks, and borders.

Time. It bloſſoms in ſummer, and the ſeed is ripe uſually about the middle or latter end of Auguſt.

Government and Virtues. Mars owns this herb. It is frequently uſed to provoke urine and to expel the abundance of thoſe watery humours by urine which cauſe the dropſy. The decoction of the herb with the leaves and flowers in wine, doth ſomewhat move the belly downwards, openeth obſtructions of the liver, helpeth the yellow jaundice, expelleth poiſon, provoketh women's courſes, and driveth forth the dead child and after-birth. Being drunk with a drachm of the powder of the ſeed, or the bark of the root of wall-wort, mixed with a little cinnamon, for ſeveral days together, it is eſteemed a ſingular remedy for the dropſy; the juice of the herb, or the diſtilled water, dropped into the eyes, is a certain cure for all heat, inflammations, and redneſs, of them; the ſame, put into foul ulcers, whether cankerous or fiſtulous, with tents, or the parts waſhed or injected therewith, cleanſeth them thoroughly from the bottom, and healeth them up with ſafety; it alſo cleanſeth the ſkin of the morphew, ſcurf, wheals, pimples, or other ſpots and blemiſhes, either uſed by itſelf or with the powder of lupines.

## FLEA-WORT.

Description. The ordinary flea-wort riſeth up with a ſtalk about two feet high, though ſometimes higher; full of joints and branches on every ſide, quite up to the top; at each of the joints grow two ſmall, long, and narrow, whitiſh green leaves, which are ſomewhat hairy. At the tops of the branches ſtand ſeveral ſmall, ſhort, ſcaly, or chaffy, heads, out of which come forth ſmall whitiſh yellow threads, ſomewhat like thoſe of the plantane herbs, which are the bloſſoms or flowers. The ſeed contained in thoſe heads is ſmall and ſhining, and very much reſembles fleas, both in ſize and colour, whilſt it is freſh, but turns black as its age advances. The root is ſhort, white, hard, and woody, periſhing every year, and riſing from its own ſeed, which it promiſcuouſly ſheds. The whole plant is rather whitiſh and hairy, ſmelling ſomewhat like roſin.

There is another ſort hereof, differing not from the former in the manner of its growth, but the ſtalks and branches are ſomewhat greater; bending down towards the ground; the leaves are rather larger, the heads a little leſs, and the ſeed very much alike. The root and leaves abide all the year, and do not periſh in the winter ſeaſon like the former.

Place. The firſt groweth only in gardens, but the ſecond plentifully in fields and paſtures near the ſea.

Time. They flower in July, or thereabouts.

Government and Virtues. The herb is cold and dry, and of a Saturnine quality. The ſeed fried and taken ſtayeth the flux or laſk of the belly, and the corroſions that proceed from hot, choleric, ſharp, and malignant, humours, or from too ſtrong an operation of any medicine, as ſcammony, &c. The mucilage of the ſeed made with roſe-water, and a little ſugar-candy added thereto, is very good in all hot agues and burning fevers and inflammations; alſo to allay the thirſt, and lenify the dryneſs and roughneſs of the tongue and throat. It helpeth hoarſeneſs of the voice, diſeaſes of the breaſt and lungs, cauſed by heat or ſharp ſalt humours, and alſo the pleuriſy. The mucilage of the ſeed made with plantane-water, with the yolk of an egg and a little populeon added thereto, is a ſafe and ſure remedy for the ſharpneſs, prickings, and pains, of the hemorrhoids, or piles, if it be laid on a cloth and bound thereto. It healeth inflammations in all parts of the body, and the pains ariſing therefrom, as the head-ach, &c. It eaſeth the pains of impoſthumes, ſwellings, and breakings-out, of the ſkin, as blains, wheals, puſhes, purples, and the like; as alſo the pains of the joints, gout, ſciatica, and diſlocated members; and, applied with oil of roſes and vinegar, it is good to help the burſting of young children, and the ſwelling of the navel. It is a good remedy for ſore breaſts and nipples of women; the juice of the herb with a little honey, put into the ears, helpeth the running and deſtroyeth the worms breeding therein; the ſame alſo mixed with hogs's greaſe, and applied to corrupt and filthy ulcers, cleanſeth and healeth them.

## FLEA-BANE.

Names. IT is called alſo in Engliſh mullet, and in Latin *conyza.*

Government and Virtues. It is hot and dry in the third degree. The herb being ſpread under foot, or burnt and ſmoked in any place, will drive away venomous creatures, and will kill and deſtroy fleas and gnats. An ointment of the root and leaves is uſed with ſucceſs for the itch.

## FLIX-WEED.

Description. IT riſeth up with a round, upright, hard, ſtalk, four or five feet high, ſpreading into ſeveral branches, whereon grow many greyiſh-green leaves very finely cut, and ſevered into a number of ſhort and almoſt round parts. The flowers are very ſmall and yellow, growing ſpike-faſhion, after which come very long ſmall pods, containing yellowiſh ſeed. The root is long and woody, periſhing every year.

There is another ſort of this plant, differing from the former only in the leaves, theſe being ſomewhat broader; both kinds are of a very diſagreeable ſmell, and of a biting taſte.

Place. They grow wild in fields and by hedge-ſides and highways; alſo among rubbiſh, and other places.

Time. They flower and ſeed in June and July.

Government and Virtues. This herb is alſo Saturnine. The herb and ſeed is of excellent uſe to ſtay the flux and laſk of the belly, being taken in water wherein gads of heated ſteel have been often quenched; and is no leſs effectual for theſe purpoſes than plantane or comfrey, and to reſtrain any other flux of blood, either in man or woman; as alſo to conſolidate broken and diſlocated bones. The juice thereof drunk in wine, or the decoction of the herb taken, killeth the worms in the ſtomach and belly, as alſo ſuch as are ſometimes ſeen in putrid and ulcerated wounds. Made into a ſalve, it is a good plaſter for foul and malignant ſores; the diſtilled water of the herb anſwereth the ſame purpoſes, though ſomewhat weaker, yet it is eſteemed a fine medicine, and often choſen in preference to the former. Syrups, ointments, and emplaſters, of it, are truly valuable houſhold medicines.

## FLUELLIN.

Description. It ſhooteth forth many long branches, partly lying upon the ground, and partly ſtanding upright, ſet with almoſt round leaves, yet a little pointed, and ſometimes bordering upon an oval ſhape, placed without order, ſomewhat hoary, and of an evil greeniſh white colour; from the joints to the tops of the ſtalks, grow with the leaves, upon ſmall ſhort footſtalks, ſmall flowers, one at each place, opening or gaping like ſnap-dragons, or rather like toad-flax, with the upper part of a yellow colour, and the under of a purpliſh, with a ſmall heel or ſpur behind; after theſe come ſmall round heads, containing ſmall black ſeed. The root is ſmall and thready, periſhing annually, and riſing again of its own ſowing.

There is another ſort which has longer branches, wholly trailing upon the ground, two or three feet long, and ſometimes not quite ſo thick ſet with leaves, which alſo grow upon ſmall footſtalks; they are rather larger than the former, and ſometimes jagged on the edges; but, the lower part being the broadeſt, and terminating in a ſmall point, its ſhape does not bear the moſt diſtant reſemblance to that of the ear of moſt animals; it is ſomewhat hairy, but not hoary, and of a better green than the firſt. The flowers come forth like thoſe aforementioned, but the colour of the upper part is rather white than yellow, and the purple not ſo fair; the flower is every way larger, as are the ſeeds and ſeed-veſſels. The root is like the other, and periſheth yearly.

Place. They grow in the borders and other parts of corn fields and fertile grounds, eſpecially near Southfleet in Kent; and at Buckworth, Hamerton, and Rickmanſworth, in Huntingdonſhire; and in many other places.

Time. They are in bloom about June or July, and the whole plant is dry and periſhed before September.

Government and Virtues. It is a lunar herb. The leaves bruiſed and applied with barley-meal to watering eyes that are hot and inflamed by defluxions from the head, help them exceedingly; as alſo the flooding of blood and humours, as the laſk, bloody flux, women's courſes, bleeding of the noſe, mouth, or any other place, or proceeding from any bruiſe, wound, or burſting of a vein, and greatly helpeth ſuch parts as need conſolidating and ſtrengthening; it is no leſs effectual in cloſing and healing green wounds, than in cleanſing and curing foul and ulcerated ſores, fretting and ſpreading cankers, &c.

## FOX-GLOVE.

Description. IT hath many long and broad leaves lying upon the ground, dented about the edges, a little ſoft or woolly, and of a hoary green colour; among theſe grow up ſeveral ſtalks, but generally one which bears the aforeſaid leaves from the bottom to the middle upwards, from whence to the top it is ſet with large and long, hollow, reddiſh, purple, flowers, being a little longer at the lower edge, and ſpotted with white on the inſide; there are threads in the middle, from whence riſe round heads, pointed ſharp at the ends, and containing ſmall brown ſeed therein; they grow one above another, with ſmall green leaves thereat, hanging their heads downward, and each turning the ſame way. The roots conſiſt of ſmall fibres, among which are ſome of a tolerable ſize. The bloſſoms are without ſmell, and the leaves are of a bitter hot taſte.

Place. It groweth in dry ſandy places, and as well on high as low grounds; alſo under the hedge-ſides, in almoſt every part of this kingdom.

Time. It ſeldom flowereth before July, and the ſeed is ripe in Auguſt.

Government and Virtues. This herb is under the dominion of Venus. It is of a gentle cleanſing nature, and is frequently uſed to heal freſh or green wounds, by bruiſing the leaves and binding them thereon, and the juice thereof is alſo uſed for old ſores, to cleanſe, dry, and heal, them. The decoction made with ſugar or honey, is effectual in cleanſing and purging the body, both upwards and downwards, of tough phlegm and clammy humours, and to open obſtructions of the liver and ſpleen. It hath been found by experience to be available for the king's evil, the herb being bruiſed and applied, or an ointment made with the juice, and ſo uſed. A decoction of two handfuls thereof with four ounces of polypody, in ale, hath been found to cure thoſe of the falling ſickneſs who have been afflicted therewith for upwards of twenty years. It is a ſovereign remedy for a ſore head.

## FUMITORY.

Description. OUR common fumitory is a tender ſappy herb, ſending forth, from one ſquare, ſlender, weak, ſtalk, and leaning downwards on all ſides, many branches two or three feet long, with leaves thereon of whitiſh, or rather bluiſh, ſea-green leaves, finely cut and jagged; at the tops of the branches ſtand many ſmall flowers, one above another, forming a kind of ſpike, of a reddiſh purple colour, with whitiſh berries; theſe are ſucceeded by ſmall round huſks, which contain the ſeed. Its root is yellow, ſmall, and not very long, full of juice while it is green, but periſheth as the ſeed ripens. In ſome parts of Cornwall there is a ſpecies of this plant which beareth white bloſſoms.

Place. It groweth generally in corn-fields and cultivated grounds, and is alſo a garden plant.

Time. It flowereth in May, and the ſeed ripens ſoon after.

Government and Virtues. Saturn claims dominion over this herb. The ſyrup or juice made thereof, or the decoction made in whey, with ſome other purging or opening herbs and roots added thereto, in order to ſtrengthen its operation, (being of itſelf but weak,) is very effectual for the liver and ſpleen, opening the obſtructions thereof, and clarifying the blood from ſaltiſh, choleric, and malignant, humours, which cauſe leproſy, ſcabs, tetters, itch, and ſuch-like breakings-out of the ſkin; and, after having performed theſe ſervices, it ſtrengthens all the inward parts. It cureth the yellow jaundice, and expelleth it by urine, which it procureth in abundance. The powder of the dried herb, given for ſome time together, cureth melancholy; but the ſeed is moſt effectual. The diſtilled water of the herb is alſo of good effect in the former diſeaſes, and is an excellent preventative againſt the plague, being taken with good treacle; or, gargled with a little water and honey of roſes, it helpeth the ſores of the mouth and throat. The juice, dropped into the eyes, cleareth the ſight, and taketh redneſs and other defects therefrom. Dioſcorides ſaith, it hindereth the hair from growing afreſh on the eyelids, if they are anointed with the juice hereof having gum arabic diſſolved therein. The juice of fumitory and docks mingled with vinegar, and the places gently waſhed or wet therewith, cureth all ſorts of ſcabs, pimples, itch, wheals, or puſhes, which are incident to the face, hands, or any other part of the body.

## FURZE-BUSH.

IT is ſo well known by this name, as alſo by that of goſs, or whins, that a minute deſcription would be totally uſeleſs.

Place. It is known to grow on dry barren heaths, and other waſte, gravelly, and ſandy, ground.

Time. They flower in the ſummer-months.

Government and Virtues. Mars owns this herb. It is hot and dry, and good to open obſtructions of the liver and ſpleen. A decoction, made with the flowers, is effectual againſt the jaundice, as alſo to provoke urine, and cleanſe the kidneys from the gravel and ſtone.

## FENUGREEK.

Names. IT is called in Latin *fœnum græcum*, or otherwiſe greek-hay.

Description. It groweth up with tender ſtalks, round, blackiſh, hollow, and full of branches; the leaves are divided into three parts, like thoſe of trefoil; the flowers are pale or whitiſh, not much unlike the bloſſoms of lupines, but ſmaller. After theſe are fallen away, there follow long cods or huſks, crooked and ſharp pointed, wherein is contained the ſeed, which is of a yellowiſh colour. The root is full of ſmall hanging hairs.

Place. It very ſeldom groweth in this kingdom, unleſs planted in the gardens of botaniſts.

Time. It bloſſoms in July, and the ſeed is ripe in Auguſt.

Government and Virtues. Fenugreek-ſeed is hot in the ſecond degree, and dry in the firſt, and under the influence of the planet Mercury. The ſeed which is ſold by druggiſts and apothecaries is only uſed in medicine. The decoction or broth of the ſeed, drunk with a little vinegar, expelleth and purgeth all ſuperfluous humours which cleave to the bowels; the ſame decoction firſt made with dates, and afterwards made into a ſyrup with honey, mundifieth and cleanſeth the breaſt, cheſt, and lungs, and may be taken with ſucceſs for any grief attendant thereon, provided the patient be not afflicted with a fever or head-ach, as this ſyrup, being hurtful to the head, would rather increaſe than alleviate thoſe diſorders. It is of a ſoftening and diſſolving nature, therefore the meal thereof, being boiled in mead or honey-water, doth conſume, ſoften, and diſſolve, hard ſwellings and impoſthumes; alſo a paſte made thereof, with ſaltpetre and vinegar, doth ſoften and waſte the hardneſs and ſwelling of the ſpleen. It is good for women who are afflicted with an impoſthume, ulcer, or ſtoppage, in the matrix, to bathe and ſit in a decoction thereof; alſo a ſuppoſitory made of the juice of this plant, and conveyed to the neck of the matrix, will mollify and ſoften all hardneſs thereof. The decoction of fenugreek is an excellent waſh for the head, as it cleanſeth the head of every kind of dirt, viz. ſcurf, ſcales, dandriff, nits, &c. Applied with honey, it cleanſeth the face and other parts of pimples, puſhes, wheals, and other blemiſhes; it healeth the itch, and preventeth the diſagreeable ſmell which oftentimes proceeds from perſpiration. The ſeed, being prepared after the manner of lupines, and eaten, will gradually and gently purge the belly of coſtive humours.

## FISTIC-NUTS.

Names. THESE nuts are alſo called in ſhops *piſtacia*, *piſtacies*, and *fiſtici*.

Description. The tree bearing theſe nuts hath long great leaves, ſpread abroad, conſiſting of five, ſeven, or more, leaves, growing one againſt another, upon a reddiſh rib or ſinew, whereof the laſt, which is alone at the top of the leaf, is much the largeſt; the fruit is much like hazel-nuts, or kernels of the pine-apple.

Place. This tree is a ſtranger in this country, but is a native of Syria and other eaſtern countries.

Government and Virtues. Fiſtic-nuts are under the influence of Jupiter. They are of a mean or temperate heat, and ſomewhat aſtringent; they are good to open ſtoppages and obſtructions of the liver, and for ſtrengthening the ſame; they are alſo good for the ſtomach, they open the pipes of the breaſt and lungs, and, being eaten either alone or with ſugar, are exceeding good for the phthyſic and ſhortneſs of breath. Dioſcorides ſaith, that fiſtic nuts given in wine are an excellent remedy for the biting of venomous beaſts.

## FLAX.

Names. IT is called in Latin *linum*, by which name it is well known in ſhops; alſo *lin*, whence the cloth that is made thereof is called linen-cloth; its ſeed is called linſeed, and the oil produced therefrom linſeed-oil.

Description. Flax hath a tender ſtalk, covered with ſharp narrow leaves, parted at the top into ſmall ſhort branches, which bring forth fair blue flowers; theſe are ſucceeded by round knobs or buttons, containing a blackiſh, large, fat, and ſhining, ſeed.

Place. It is cultivated in this country, and ſown in fine moiſt fertile grounds, eſpecially ſuch as lie low.

Time. It flowereth in May and June, and ripens ſoon after.

Government and Virtues. It is under the dominion of Venus; the ſeed of this plant, being only uſed in medicine, is hot in the firſt degree, and temperately moiſt and dry. The ſeed, or linſeed, being boiled in water and applied as a poultice or plaſter, aſſuages all pains, ſofteneth cold tumours or ſwellings, the impoſthumes of the neck and ears, and of other parts of the body. Linſeed pounded with figs is good to ripen and bring to a head boils and other ſwellings; alſo to draw forth thorns and ſplinters, being mixed with the root of wild cucumber. The ſeed mingled with honey and creſſes, and laid upon rough, rugged, and ill-favoured, nails, either of the hands or feet, cleanſeth and clarifieth thoſe that are corrupt; or laid on the face, cleanſeth and taketh away all ſpots and freckles thereof. The wine, wherein linſeed hath been boiled, preſerveth old ſores and ulcers from corruption, being waſhed therewith, and from feſtering and inward rankling; the water wherein linſeed hath been boiled, doth quicken and clear the ſight, by being often dropped into the eyes. Uſed in clyſters, it aſſuageth the griping pains of the belly, as well as of the matrix or mother, and cureth all wounds of the ſame. The ſeed mixed with honey, and taken as an electuary, cleanſeth the breaſt, and helpeth the cough; compounded with raiſins, it is good for ſuch as are conſumptive, or troubled with hectic fevers. The ſeed of lin taken in too great a quantity is injurious to the ſtomach; it ingenders wind, and hinders digeſtion of meat.

## FIR-TREE.

Names. THIS tree is called in Latin *abis*, by the Dutch *maſtboom*, becauſe of its utility in making maſts for ſhips; and the liquid or clear roſin that iſſueth from the bark of the young trees is called *terebinthina veneta*, but is generally known to us by the name of Venice turpentine.

Description. The fir-tree is large, high, and long, and continues always green; it grows much higher than the pine or pitch-tree; the ſtalk is very even and ſtraight, plain beneath and without joints, but upwards it grows with joints and knobs; upon theſe joints grow the branches, bearing leaves almoſt like yew, but ſmaller, longer, and ſharper at the ends, of a bluiſh green colour; the fruit is like the pine-apple, but ſmaller and narrower, not hanging down, but growing ſtraight upward. From out of the bark of the young trees is gathered a fair liquid roſin, clear and ſhining, in taſte bitter, almoſt like to citron-peel or lemon-peel condited. There is alſo found upon this tree a white roſin or gum, ſomewhat like that which the pine and pitch trees produce.

Place. It grows upon the high mountains in Greece, Italy, Spain, and France, and in many places of Germany and Norway: from whence the timber thereof is imported into this kingdom, for the purpoſes of building, &c.

Government and Virtues. It is under the dominion of Mars. The bark and dry gum or roſin of this tree are in temperature and virtues like the bark and roſin of the pine-tree, but thoſe of the fir-tree are of a more acrimonious and cleanſing quality. The liquid or clear roſin is hot and dry in the ſecond degree, of a ſharp quality, and of a digeſtive or cleanſing nature: this liquid, taken to the quantity of half an ounce, looſeth the belly and expelleth all choleric humours; it mundifieth and cleanſeth the kidneys and bladder, provoketh urine, expelleth the ſtone and gravel, and is good to be taken often by thoſe who are troubled with the gout;

the ſame taken with nutmeg and ſugar, about the quantity of a nut, helpeth the ſtranguary, and is very good againſt excoriations or going off of the ſkin, or flux of the privities. It is alſo an excellent remedy for green wounds, eſpecially thoſe of the head, for it cleanſeth and healeth ſpeedily.

## GARLIC.

IT is ſo univerſally known, that I ſhall decline troubling my readers with any deſcription of it.

Government and Virtues. Mars owns this herb. It provoketh urine and women's courſes, and helpeth the biting of mad-dogs and other venomous creatures; it killeth worms in children, cutteth and bringeth forth tough phlegm, purgeth the head, helpeth the lethargy, and is a good preſervative againſt, and a remedy for, any plague-ſore, or foul ulcer; it taketh away ſpots and blemiſhes of the ſkin, eaſeth pains of the ears, and ripeneth and breaketh impoſthumes and other ſwellings. It has been noticed that onions are equally effectual for the ſaid purpoſes, but garlic hath many peculiar virtues which the onions cannot boaſt of; for inſtance, it hath a ſpecial quality to remove all inconveniences proceeding from corrupt agues or mineral vapours, or from drinking ſtagnated or unclean water; as alſo by taking of wolf-bane, henbane, hemlock, or other poiſonous herbs. It is alſo exceeding good in hydropic diſeaſes, the jaundice, falling ſickneſs, cramps, convulſions, the piles or hemorrhoids, and other cold diſeaſes. However, having ſhewn its many virtues, it is alſo neceſſary that its vices ſhould not be concealed; its heat is very vehement, and every thing of that deſcription naturally conveys ill vapours to the brain; in choleric caſes it adds fuel to the fire; in men oppreſſed with melancholy it extenuates the humour, and confounds the idea with ſtrange viſions and fancies, and therefore ought to be taken with the ſtricteſt care by thoſe whoſe ill-diſpoſition of body will not admit of a liberal application. A few cummin ſeeds, or a green bean or two, being chewed after eating garlic, will entirely remove the diſagreeable ſmell of the breath proceeding therefrom.

## GENTIAN.

CALLED alſo felwort and baldmony.

It is acknowledged that the gentian uſed by us ſome years ago was imported from beyond the ſea, but we have ſince happily found that our own country is by no means deficient of thoſe bleſſings which can contribute to the health of man. There are two ſorts of gentian the growth of this kingdom, which have been proved by the experience of the moſt able phyſicians to be rather of ſuperior excellence to that of the foreign herb.

Description. The greater of the two hath many long and ſmall roots, which grow deep in the ground, and abide all the winter. The ſtalks grow ſeveral together, of a browniſh green colour, which are ſometimes two feet high, eſpecially if the ſoil is good, having many long, narrow, dark-green, leaves, ſet by couples up to the top; the flowers are long and hollow, of a brightiſh purple colour, and ending in five corners.

The ſmaller kind groweth up with ſeveral ſtalks, not quite a foot high, parted into many branches, whereon grow two or three ſmall leaves together, not unlike thoſe of the ſmaller centaury, of a whitiſh green colour; on the top of the ſtalks grow divers perfect blue flowers, ſtanding in long huſks, but not ſo big as the other. The root is very ſmall and thready.

Place. The former groweth in many places in the eaſt and weſt counties, as at Longfield near Graveſend, alſo at Cobham, Lellingſtone, and in the chalk-pits adjacent to Dartford in Kent.

The ſecond kind groweth alſo in many places in Kent, as about Southfleet and Longfield; and upon the barren hills in Bedfordſhire. It is likewiſe found not far from St. Alban's, on the road from Dunſtable towards Gorhambury.

Time. They bloom in Auguſt, and ſhed their ſeed ſoon after.

Government and Virtues. They are under the dominion of Mars. They reſiſt putrefaction, poiſon, and peſtilence; nor is there a more excellent herb for ſtrengthening the ſtomach, and helping digeſtion; it preſerves the heart, and prevents fainting and ſwooning. The powder of the dried roots helps the bitings of venomous beaſts, opens the obſtructions of the liver, and reſtoreth loſt appetite. Steeped in wine and drunk, it refreſheth ſuch as are weary with travelling; it helps ſtitches and griping pains in the ſides, and is an excellent remedy for ſuch as are bruiſed by falls; it provokes urine and the terms exceedingly, conſequently ſhould be avoided by pregnant women. The decoction is very profitable for thoſe who are troubled with cramps and convulſions: alſo it breaks the ſtone, and is a great help for ruptures. It is good for cold diſeaſes, and to expel tough phlegm, and cure all ſcabs, itch, and fretting ſores and ulcers. It is an admirable remedy to deſtroy the worms in the body, by taking half a drachm of the powder in the morning in any convenient liquor, and is equally good for the king's evil. To help agues of all ſorts, the yellow jaundice, and the bots in cattle, there is no herb ſuperior to this. When kine are bitten on the udder by any venomous beaſt, if the affected parts are waſhed with a decoction hereof, it will prove a certain cure.

## CLOVE-GILLIFLOWERS.

TO deſcribe this herb, it being ſo well known, would be altogether fruitleſs.

Government and Virtues. They are fine temperate flowers, of the nature and under the dominion of Jupiter; even ſo temperate, that no exceſs, either in heat, cold, drineſs, or moiſture, can be perceived in them. They are great ſtrengtheners of the brain and heart, and will therefore make an excellent cordial for family purpoſes. Either the conſerve or ſyrup of theſe flowers, taken at intervals, is good to help ſuch whoſe conſtitution is inclinable to be conſumptive. It is good to expel poiſon, and help hot peſtilent fevers.

## GERMANDER.

Description. COMMON germander ſhooteth forth many ſtalks, with ſmall and ſomewhat round leaves, dented on the edges; the flowers ſtand at the tops, of a deep purple colour. The root is compoſed of many ſprigs, which ſhoot forth a great way round about, ſoon overſpreading the adjacent ground.

Place. It groweth uſually in gardens.

Time. It flowereth in June and July, and the ſeed is ripe in Auguſt.

Government and Virtues. It is an herb under the dominion of Mercury. It ſtrengthens the brain and apprehenſion exceedingly, and relieves them when drooping; taken with honey, it is a remedy for coughs, hardneſs of the ſpleen, and difficulty of urine; or, made into a decoction and drunk, it helpeth thoſe who are troubled with the dropſy, eſpecially if taken at the beginning of the diſorder. It alſo bringeth down women's courſes, and expelleth the dead child; being drunk in wine, and the bruiſed herb outwardly applied, it is a certain cure for the poiſon of ſerpents; uſed with honey, it cleanſeth old and foul ulcers, and made into an oil, and the eyes anointed therewith, taketh away the moiſture and dimneſs of them, and is good for the pains of the ſides and cramps. The decoction thereof, taken for ſome days together, driveth away and cureth both the tertian and quartan agues; it is alſo good againſt all diſeaſes of the brain, as continual head-ach, falling ſickneſs, melancholy, drowſineſs and dulneſs of the ſpirits, convulſions, and palſy. A drachm of the ſeed taken in powder purgeth by urine, and is good againſt the yellow jaundice; the juice of the leaves dropped into the ears killeth the worms in them; and the tops thereof, when they are in bloom, ſteeped twenty-four hours in a draught of white wine, and drunk, kill and expel the worms in the belly.

## STINKING GLADWIN.

Description. THIS is a ſpecies of the flower-de-luce, having ſeveral leaves growing from the root, very much reſembling thoſe of the flower-de-luce, but that they are ſharper edged and thicker in the middle, of a deeper green colour, narrower and ſharper pointed, and of a ſtrong diſagreeable ſmell if they are preſſed between the fingers; in the middle riſeth up a reaſonable-ſized ſtalk, about a yard high, bearing three or four flowers at the top, made ſomewhat like thoſe of the flower-de-luce, with three upright leaves, of a dead purpliſh aſh-colour, with veins in them of a different colour; the other three leaves do not fall down, neither are the three ſmall ones ſo finely arched, nor do they cover thoſe at the lower part; in theſe particulars it differs ſomewhat from that aforeſaid. Theſe are ſucceeded by three-ſquare hard huſks, opening wide into three parts when they are ripe, wherein lie reddiſh ſeed, which in time turneth black. The root is like that of the flower-de-luce, but reddiſh on the outſide and whitiſh within, of a very ſharp and hot taſte, and of an exceeding diſagreeable ſmell.

Place. This groweth as well on the upland grounds as in woods and moiſt ſhadowy places, as alſo by the ſea-ſide, in many parts of this kingdom, and is often cultivated in gardens.

Time. It bloſſoms in July, and the ſeed is ripe in Auguſt and September; yet the huſks, when they are ripe, will open themſelves, and contain their ſeed two or three months before they ſhed it.

Government and Virtues. It is ſuppoſed to be under the dominion of Saturn. A decoction of the roots purgeth corrupt phlegm and choler, but, when wanted to operate more gently, a few ſlices of the roots infuſed in ale will anſwer the purpoſe, though thoſe whoſe ſtomachs will not admit of this make uſe of the leaves only. The juice hereof, ſnuffed up the noſtrils, cauſeth ſneezing, and thereby draweth from the head much corruption; or the powder thereof uſed the ſame way, produceth the like effect. The powder, drunk in wine, helpeth thoſe who are troubled with cramps and convulſions, or with the gout or ſciatica, and eaſeth the gripings of the belly; it helpeth the ſtranguary, and cleanſeth, purgeth, and ſtayeth, the ſharp and evil humours which cauſe long fluxes. The root boiled in wine, and drunk, doth effectually procure women's courſes, and, uſed as a peſſary, worketh the ſame effect, but cauſeth abortion in women with child. Half a drachm of the ſeed, beaten to powder, and taken in wine, doth ſpeedily cauſe an evacuation of urine; or, taken with vinegar, diſſolveth the hardneſs and ſwellings of the ſpleen. The root is very effectual in all wounds, and particularly thoſe of the head; as alſo to draw forth ſplinters, thorns, broken bones, or any other thing ſticking in the fleſh, by being uſed with a little verdegreaſe and honey, together with the great centaury root. The ſame, boiled in vinegar, diſſolveth and conſumeth tumours and ſwellings; the juice of the leaves and roots healeth the itch, and cleanſeth the ſkin from all blemiſhes.

## GOLDEN ROD.

Description. It groweth up with browniſh, ſmall, round, ſtalks, two feet high and ſometimes more; having thereon many narrow and long dark green leaves, generally plain on the edges, and are ſometimes, though very rarely, found with white ſtrakes or ſpots thereon; the ſtalks are divided towards the top into many ſmall branches, bearing thereon ſmall yellow flowers, all which are turned one way; theſe, being ripe, are ſucceeded by a kind of down, which is carried away by the wind. The root conſiſts of many ſmall fibres, which grow but a little beneath the ſurface of the ground; it liveth for ſome years, ſhooting forth new branches yearly, which periſh at the approach of winter.

Place. It grows in the open places of woods and coppices, both in moiſt and dry grounds, in many parts of this kingdom.

Time. It flowereth about the month of July.

Government and Virtues. Venus claims dominion over this herb. It is ſpoken of by Arnoldus de Villa Nova as a moſt excellent remedy for the ſtone in the reins and kidneys, as alſo to expel the gravel by urine. The decoction of the herb, either green or dry, or the diſtilled water thereof, is very effectual for inward bruiſes, likewiſe for ſtaying the floodings of the body, as fluxes of humours, bloody fluxes, and the immoderate menſes of women; and is moſt available in all ruptures or burſtings, being internally or externally applied. It is a ſovereign wound-herb, whereby green wounds and old ulcers are ſpeedily cured; it is of particular efficacy in all lotions for ſores or ulcers in the mouth, throat, or privities, of either ſex. A decoction is ſerviceable to faſten the teeth when looſe.

## GOUT-HERB.

THIS herb is alſo frequently called herb gerrard.

Description. It is very low, ſeldom riſing more than half a yard high; it conſiſts of ſeveral leaves which ſtand on browniſh green ſtalks, generally three together, ſnipped on the edges, and of a ſtrong unpleaſant ſmell. The umbels of flowers are white, and the ſeed blackiſh; the root runneth deep into the earth, and ſoon ſpreads itſelf over a great deal of ground.

Place. It groweth by hedge and wall ſides, and often in the borders and corners of fields, and ſometimes in gardens.

Time. It flowereth in July, ſeeding about the latter end of the ſame month.

Government and Virtues. Saturn is the ruler of this plant. It is probable it took the name of gout-herb from its peculiar virtues in healing the cold gout and ſciatica, as it hath been found by experience to be a moſt admirable remedy for theſe diſorders; as alſo joint-achs, and other cold diſorders. It is even affirmed, that the very carrying of it about in the pocket will defend the bearer from any attack of the aforeſaid complaint.

## GROMEL.

OF this I ſhall briefly deſcribe three kinds, which are chiefly uſed medicinally; the virtues of each are the ſame, but different in the manner of their growth.

Description. The greater gromel riſeth up with ſlender, hard, and hairy, ſtalks, trailing and taking root as it lieth on the ground; it ſpreads itſelf by ſeveral ſmall branches, whereon grow hairy dark-green leaves. At the joints with the leaves grow many ſmall blue flowers, which are ſucceeded by hard, ſtoney, roundiſh, ſeed.

The root is round and woody, and liveth during the winter, ſhooting forth freſh herbage every ſpring.

The ſmall wild gromel groweth up with ſeveral ſtraight, hard, branched, ſtalks, two or three feet high, full of joints, bearing at each, ſmall, long, hard, and rough, leaves, very much like the former, but leſs. Among theſe leaves grow ſmall white bloſſoms, which are followed by greyiſh round ſeed like the firſt. The root is not very large, but exceedingly thready.

The garden gromel hath many upright, ſlender, woody, hairy, ſtalks, brown and creſted, with but few branches, bearing leaves like the former; the flowers are white, after which cometh rough brown huſks, containing white, hard, round, ſeed, ſhining like pearls, and greater than either of the former. The root is like that of the firſt, with many branches and ſtrings thereat, and of long duration.

Place. The two firſt grow wild in barren and untilled places. The laſt is a nurſling in the gardens of the curious.

Time. They all flower from Midſummer till September, and the ſeed ripeneth quickly after.

Government and Virtues. The dominion over theſe herbs is wholly claimed by Venus. They are of ſingular force in breaking the ſtone and expelling gravel, either in the reins or bladder; as alſo to provoke urine, and help the ſtranguary. The ſeed is moſt effectual for the above purpoſes, being bruiſed and boiled in white wine, or other convenient liquor; the powder of the ſeed is equally efficacious. Two drachms of the ſeed in powder taken with breaſt-milk, will procure a ſpeedy delivery to women afflicted with hard travail, and that cannot be delivered. The herb itſelf, (when the ſeed is not to be had,) either boiled, or the juice thereof drunk, will anſwer all the aforeſaid purpoſes, though not ſo powerful in its operation.

## GOOSEBERRY-BUSH.

CALLED alſo feap-berry, and in Suſſex dewberry-buſh, and likewiſe in many places wine-berry.

Government and Virtues. They are under the dominion of Venus. The berries, whilſt they are unripe, being ſcalded or baked, are good to procure the return of a loſt appetite, eſpecially if the cauſe proceeds from a ſtomach afflicted with choleric humours. They are exceeding good to ſtay the longing of pregnant women. The decoction of the leaves of the tree cools hot ſwellings and inflammations, as alſo the St. Anthony's fire. The ripe gooſeberries, being eaten, are an excellent remedy to allay the violent heat of the ſtomach and liver; and the young and tender leaves break the ſtone and expel the gravel both from the bladder and kidneys. If they are taken immoderately, they are ſuppoſed to breed crude humours, and ingender worms.

## WINTER-GREEN.

Description. IT ſhoots forth ſeven, eight, or nine, leaves, from a ſmall, browniſh, creeping, root, each ſtanding upon a long footſtalk; they are nearly as broad as they are long, round pointed, of a ſad green colour, hard in handling, and ſomewhat like the leaf of a pear-tree. From among theſe riſeth up a ſlender weak ſtalk, ſtanding upright, bearing at the top many ſmall, white, and ſweet-ſmelling, flowers, laid open like a ſtar, conſiſting of five round-pointed leaves, with many yellow threads ſtanding in the middle, ſurrounding a green head, having a longiſh tube with them, which in time proveth to be the ſeed-veſſel; when ripe, it is of a five-ſquare ſhape, with a ſmall point, containing ſeed as ſmall as duſt.

Place. It groweth but ſeldom in fields, but frequently in woods in the northern counties in this kingdom, as Yorkſhire, Lancaſhire, &c.

Time. It flowereth in June and July, ſhedding its ſeed ſoon after.

Government and Virtues. Winter-green is under the dominion of Saturn, and is an excellent remedy for the ſpeedy healing of green wounds, the leaves being bruiſed and applied, or the juice of them is equally effectual. A ſalve made of the bruiſed herb, or the juice boiled in hog's lard, or with ſallad-oil and wax, adding a little turpentine thereto, is a ſovereign medicine, and in high eſtimation among the Germans, who uſe it to heal all manner of wounds, ulcers, and ſores. The herb boiled in wine and water, and drunk by thoſe who are troubled with ulcers in their kidneys, or neck of the bladder, wonderfully helpeth them. It ſtayeth all fluxes, whether of blood or humours, as the laſk, bloody flux, immoderate menſtrua, and bleeding of wounds, and taketh away ſuch inflammations as riſe from the pains of the heart. It is no leſs available for foul ulcers that are hard to be cured, as alſo for cankers and fiſtulas. The diſtilled water of the herb will perform the ſame virtues, though not ſo ſpeedily.

## GROUNDSEL.

Description. OUR common groundſel hath a round, green, and ſomewhat browniſh, ſtalk, ſpreading towards the top ſeveral branches, ſet with long and ſomewhat narrow green leaves, cut in on the edges, not much unlike the oak leaves, but leſs, and round at the ends; at the tops of the branches ſtand many ſmall green heads, out of which grow yellow threads or thrumbs, which are the flowers: theſe continue many days thus blown before they are turned into down, which with the ſeed is carried away by the wind. Its root is ſmall and thready, ſoon periſhing, and as ſoon riſing again from its own ſowing.

Place. It grows almoſt every where, as well on the tops of walls as among all kinds of rubbiſh and rude grounds, but eſpecially in gardens.

Time. It may be ſeen in bloom at almoſt any time of the year, and, if permitted too ccupy good ground, each plant will ſpring and ſeed at leaſt twice in a year.

Government and Virtues. The herb is influenced by Venus. It is a univerſal medicine for all diſeaſes proceeding from heat, in whatever part of the body they may chance to happen; it is a ſafe and gentle purge for a foul ſtomach, operating each way. It is of a moiſt and cold nature, conſequently cauſeth expulſion, and repreſſeth the heat cauſed by the motion of the internal parts, through the effects of an emetic or other medicine. This herb preſerved either as a ſyrup, an ointment, or diſtilled water, is a medicine unrivalled in its efficacy for the cure of all hot diſeaſes, both for its ſafety and ſpeed. The decoction of this herb, as Dioſcorides obſerves, made with wine, helpeth the pains of the ſtomach proceeding from choler; and the juice taken in drink, or the decoction in ale, gently performeth the ſame. It is good againſt the falling ſickneſs, and jaundice; and a drachm given in oxymel, after uſing a little exerciſe, provoketh urine, and expelleth the gravel from the reins and kidneys; alſo it helpeth the ſciatica, cholic, and pains of the belly. The people in Lincolnſhire uſe this externally againſt pains and ſwellings; and, as they affirm, with great ſucceſs.

## GALINGAL.

Description. It hath long, hard, and narrow, leaves; the ſtalk is triangular, about a foot and a half high, bearing on the upper part ſeveral ſmall leaves, from among which grow ſpiky tops and white ſeed; the root is long, conſiſts of many threads, which are much tangled one within the other.

Place. It groweth in low and moiſt grounds; it is ſeldom ſeen in this kingdom, unleſs ſuch as is planted in gardens.

Time. This herb bringeth forth its ſpiky tops and ſeed, together with its leaves, in June and July.

Government and Virtues. It is a plant of Mars, and the root is hot and dry in the third degree. The roots boiled and the decoction drunk, provoketh urine, bringeth down the menſes, expelleth the ſtone, and is good for thoſe who are troubled with the dropſy; the ſame is alſo good for the cough, the ſtingings of ſcorpions, and bitings of venomous beaſts. By bathing the belly with this decoction, it ſupples the hardneſs of the mother, and remedieth the ſtoppings and coldneſs thereof. The powder of the root drieth up and healeth old running ſores of the mouth and privities, being wet with wine, and laid thereon; and is an excellent ingredient for hot ointments and maturative plaiſters. Pliny ſays, that the ſeed of galangal drunk with water, ſtoppeth the flux of the belly, and the immoderate flooding of the menſtrua; but the greateſt care muſt be taken in uſing it, as too great a quantity will cauſe a violent head-ach.

## STOCK GILLIFLOWERS.

Kinds and Names. THERE are found two kinds of theſe flowers; the one is called the caſtle or ſtock gilliflower, which may be kept both winter and ſummer. The other is not ſo large, and is called the ſmall ſtock gilliflower, which muſt be annually ſown; they are called *leucoion* and *violæ albæ*, or white violets, becauſe the leaves are white; the leaves of the flowers are of various colours, and called by ſome writers *violæ matronales*, or dame's violets.

Description. Theſe two plants are not much unlike the wall flowers, but that their leaves are whiter and ſofter; however, I ſhall treat of them reſpectively.

The great caſtle or ſtock gilliflower beareth hard and ſtraight leaves, about two feet long, by far longer and larger than the leaves of wall flowers. The bloſſoms are of a fragrant or pleaſant ſmell, much like thoſe of heart's eaſe, though much larger; ſometimes of a white, ſometimes of an aſh-colour, ſome of a carnation, and others of a ſcarlet and purple colour. Theſe are followed by long huſks, containing flat and large ſeeds.

The ſmall ſtock gilliflower has ſtalks ſomewhat like the former, with whitiſh, woolly, ſoft, leaves; the flowers are of a fine fragrant ſmell, and of various colours, followed by ſeeded cods, and in every reſpect like the firſt, except being ſomewhat ſmaller. It is about a foot high, and periſheth yearly.

Place. They are ſown and planted in moſt of our Engliſh flower-gardens, but are ſeldom found growing wild.

Time. The great caſtle gilliflower bloſſoms in March and April, the ſecond year after it is ſown; but the ſmaller kind flowereth in July and Auguſt, the ſame year in which it is firſt ſown.

Government and Virtues. They are of temperature hot and dry, of a ſimilar nature with the yellow or wall gilliflowers, and are plants of Mercury. The flowers of the ſtock gilliflower boiled in water and drunk, is good to remove all difficulty of breathing, and helps the cough; they alſo provoke the courſes and urine, and by bathing or ſitting over the decoction it cauſeth perſpiration.

## WALL, OR YELLOW GILLIFLOWER.

Names. THIS flower is ſuppoſed to be of the violet ſpecies. It is a ſmall buſh or ſhrub, called in Latin *leucocia lutea,* and by the apothecaries *keyri,* in Engliſh yellow and wall gilliflowers.

Description. The yellow wall gilliflower is green both winter and ſummer; the ſtalks thereof are hard and of a woody ſubſtance, and full of branches; the leaves are thick ſet thereon, long, narrow, and green; on the tops of the ſtalks grow the flowers, which are of a very fair yellow colour, of a ſtrong but pleaſant ſmell, and every flower is divided into four ſmall leaves; after theſe are paſt, there come cods or huſks, which contain large, flat, and yellow, ſeed.

Place. It grows in great quantities on the ruined walls of ſtone buildings, and is very often planted in gardens, though the garden kinds are generally double flowered, which gives them a peculiar beauty the other cannot boaſt of.

Time. It generally flowers in March, April, and May.

Government and Virtues. They are hot and dry plants of the Sun, whoſe influence they are under, being of ſubtil parts. Being dried and boiled in water, it provoketh urine, and bringeth down the terms; it helpeth the *ſchirrus*, or hard impoſthumes of the matrix, by being fomented therewith; a plaiſter made of the bloſſoms with oil and wax, is good to heal chaps of the fundament, and the falling down of the ſame; or, mingled with honey, cureth ulcers and ſores of the mouth. Two drachms of the ſeed taken in wine is a ſure ſpecific for bringing down the menſtrua, ſecundine, and dead child; or a peſſary made of the ſame, and conveyed into the matrix, anſwereth the ſame purpoſe. The juice dropped into the eyes, cleanſeth them from ſpots and dimneſs; and the root ſtamped with vinegar, and applied to the ſpleen, helpeth the hardneſs thereof.

## GALL-OAK.

Description. THE ſtrong gall-oak, ſo named from the fruit it bears, doth not grow ſo large nor high as other oaks, but ſhorter and very crooked, with fair ſpreading branches; on theſe grow long leaves, very much cut in on the edges, and hoary underneath; this tree flowereth and beareth acorns, as alſo a round woody ſubſtance, which is called a gall, and the timber is of a very hard ſubſtance. There are ſeveral kinds of gall-oaks, ſome of them are much ſhorter than others, bearing leaves more or leſs cut or jagged on the edges, and producing a greater quantity of galls, and no acorns at all; ſome bear large galls, others ſmall, ſome knobbed or bunched, and others ſmooth; each are of different colours, ſome white, others red, yellow, and green.

Place. Theſe oaks grow frequently in Italy, Spain, and other hot countries.

Time. They ſhoot forth their long catkins or bloſſoms early in the ſpring, which fall away for the moſt part before the leaves appear. The acorns are very ſeldom ripe before October.

Government and Virtues. I ſhall here explain the uſe, virtues, and temperament, of the galls of theſe foreign trees only, as their acorns differ but little from thoſe produced by our Engliſh oaks.

The ſmall gall, called *omphacitis*, is dry in the third degree, and cold in the ſecond; Saturnine, and of a ſour harſh nature. It is effectual in drawing together and faſtening looſe and faint parts, as the overgrowing of the fleſh; it expelleth and drieth up rheums and other fluxes, eſpecially thoſe that fall upon the gums, almonds of the throat, and other places of the mouth.

The other whiter gall doth alſo bind and dry, but not ſo much as the former, having a leſs quantity of that ſour harſhneſs in it; it is good againſt the dyſentery or bloody flux. The decoction of them in water is of a mean aſtriction, but more powerful in harſh red wine; being ſat over, it remedieth the falling of the mother, or the galls being boiled and bruiſed, and applied to the fundament when fallen, or to any ſwelling or inflammation, will prove a certain cure. The coals of burned galls being quenched in wine or vinegar, is good to ſtanch bleeding in any place. They will dye the hair black, and are one of the chief ingredients for making ink; they are likewiſe uſed by dyers for making black dye.

The oak-apple is much of the nature of galls, though inferior in quality, but may be ſubſtituted for them with ſucceſs to help rheums, fluxes, and other ſuch-like painful diſtempers.

HEART's

## HEART's EASE.

IT is called in Suſſex panſies, and is ſo well known by almoſt every perſon, that I ſhall decline troubling my readers with a deſcription of it.

Place. Beſides thoſe which are cultivated in gardens, they grow wild in barren and unfertile grounds.

Time. They flower and ſeed all the time of ſpring and ſummer.

Government and Virtues. This is a Saturnine plant, of a cold, ſlimy, and viſcous, nature. A ſtrong decoction of the herb and flowers is an excellent cure for the venereal diſorder, being an approved anti-venerean; it is alſo good for the convulſions in children, falling ſickneſs, inflammations of the lungs and breaſt, pleuriſy, ſcabs, itch, &c. It will make an excellent ſyrup for the aforeſaid purpoſes.

## HEARTICHOKE.

THE Latins calls them *cineria*, and they are alſo termed *artichocus*.

Government and Virtues. They are under the dominion of Venus. They are great provocatives to luſt, yet ſtay the involuntary courſe of natural ſeed in man; the decoction of the root boiled in wine, or the root bruiſed and diſtilled in wine, and drunk, purgeth by urine exceedingly.

## HART's TONGUE.

Description. It conſiſts of ſeveral leaves riſing from the root, every one ſeparately, folding themſelves in their firſt ſpringing and ſpreading; when at their full growth they are about a foot long, ſmooth and green, but hard and ſappy in the middle, ſtraked on the back athwart on both ſides of the middle rib, with ſmall and ſomewhat long browniſh marks; the bottoms of the leaves are a little bowed on each ſide of the middle rib, and ſomewhat ſmall at the end. The root is compoſed of many black threads, which are much entangled together.

Time. It is green all the winter, having new leaves every year.

Government and Virtues. Jupiter claims dominion over this herb. It is a ſingular remedy to ſtrengthen the liver when weak, and eaſe it when afflicted; it is eſteemed for its efficacy in removing the hardneſs and ſtoppings of the ſpleen and liver; alſo againſt the heat of the liver and ſtomach, as well as the laſk and bloody flux. The diſtilled water is good for the paſſions of the heart, and gargled in the mouth will ſtay the hiccough, help the falling of the palate, and ſtop the bleeding of the gums. It is a good remedy for the biting of ſerpents.

## HAZEL-NUT.

THEY are ſo well known to every boy, that they require no deſcription.

Government and Virtues. They are under the dominion of Mercury. The parched kernels made into an electuary, or the milk drawn from the kernels with mead or honeyed water, are very good to help an old cough; and, being parched, and a little pepper added thereto, and taken in drink, digeſt the diſtillations of rheum from the head. The dried huſks and ſhells, to the quantity of about two drachms, taken in red wine, ſtay the laſks, and women's courſes; but the red ſkin which covers the kernel is much more effectual for the latter purpoſe.

## HAWK-WEED.

Description. IT hath many large leaves lying on the ground, having many deep gaſhes on the edges, ſomewhat like thoſe of the ſow-thiſtle; from among theſe riſeth up a hollow rough ſtalk, two or three feet high, branched from the middle upwards. On theſe are ſet, at every joint, ſeveral leaves cut but very little on the edges, bearing at the top many pale yellow flowers, conſiſting of ſmall narrow leaves, broad pointed, and nicked in on the edges, ſet in a double row, and ſometimes more, the outſide leaves being the largeſt. Theſe flowers are turned into down, bearing ſmall browniſh ſeed, which is blown away with the wind. The root is long and rather large, with many ſmall fibres thereat. The whole plant is full of bitter milk.

Place. It groweth in many places, eſpecially in fields and borders of pathways, in dry grounds.

Time. It bloſſoms and diſperſeth its down in the ſummer months.

Government and Virtues. Saturn claims dominion over this herb. Dioſcorides ſays, it is cooling, ſomewhat dry and binding, and therefore good for the heat and gnawings of the ſtomach, for inflammations, and hot ague-fits. The juice thereof, taken in wine, helpeth digeſtion, expelleth wind, preventeth crudities from clogging the ſtomach, and cauſeth an eaſy evacuation of urine; being outwardly applied, it is a ſovereign cure for the ſtinging and biting of venomous beaſts, and is good for all poiſons. A ſcruple of the dried juice, taken in wine and vinegar, is profitable for the dropſy; the decoction of the herb, taken with honey, digeſteth thin phlegm in the cheſt and lungs, and, mixed with hyſſop, it helpeth the cough. The decoction hereof, mixed with that of wild ſuccory made with wine, and taken, helpeth the wind-cholic and hardneſs of the ſpleen, procureth reſt and ſleep, preventeth venery, cooleth heats, purgeth the ſtomach, encreaſeth blood, and helpeth all diſeaſes of the reins and bladder. Applied externally, it is a ſingular remedy for all defects and diſeaſes of the eyes, being uſed with breaſt milk; and is of equal ſucceſs when adminiſtered to fretting and creeping ulcers, if taken in time. The green herb bruiſed, and mixed with a little ſalt, is effectual in helping burns, if it be uſed before the bliſters riſe; all inflammations, St. Anthony's fire, and all puſhes and eruptions, heat and ſalt phlegm. The ſame applied with meal and fair water, in the manner of a poultice, to any place affected with convulſions and the cramp, or diſlocated members, giveth great help and eaſe. The diſtilled water cleanſeth the ſkin from all blemiſhes. The uſe of this herb is moſtly external, but it is very eminent; it cools, ſoftens, and heals. I ſaw this year an arm covered with fiery puſtules on the one half, and the other with terrible remains of ſcratching, cured by it in four days; the leaves were beat to a poultice with bread, milk, and a little oil, and tied round the arm.

## HAWTHORN.

I DO not mean to trouble my readers with the deſcription of a tree ſo univerſally known to almoſt every inhabitant of this kingdom.

It is generally a hedge-buſh, but, by being carefully pruned and dreſſed, it will grow to a reaſonable height. As for the hawthorn-tree of Glaſtonbury, which is ſaid to flower yearly on Chriſtmas-day, it rather ſhews the ſuperſtition of thoſe who entertain this opinion than excites wonder on any other account, ſince the ſame may be found in many other places of this kingdom; as at a place called White-green, near Namptwich in Cheſhire; and alſo in Romney-marſh. Theſe, if the winter happens to be mild, will be in full bloom about Chriſtmas.

Government and Virtues. It is a tree of Mars. The berries, or the ſeed in the berries, beaten to powder and drunk in wine, are a ſingular remedy for the ſtone, and no leſs effectual for the dropſy. The diſtilled water of the flowers ſtayeth the laſk; and the ſeeds, cleeted from the down, then bruiſed and boiled in wine, will give inſtant relief to the tormenting pains of the body. If cloths and ſpunges are wet in the diſtilled water, and applied to any place wherein thorns, ſplinters, &c. are lodged, it will certainly draw them forth.

## HEMLOCK.

Description. THE common great hemlock groweth up with a green ſtalk, four or five feet high, and ſometimes higher, full of red ſpots; at the joints are ſet very large winged leaves, which are divided into many other winged leaves, ſet one againſt another, dented on the edges, and of a ſad green colour. The ſtalks are branched towards the top, each bearing umbels of white flowers, which are followed by whitiſh flat ſeed. The root is long, white, hollow, and ſometimes crooked, of a very ſtrong, heady, and diſagreeable, ſmell.

Place. Its growth is not confined to any particular ſpot in this kingdom, but it may be found by moſt old walls, hedge-ſides, and uncultivated grounds.

Time. It generally flowereth and ſeedeth in July.

Government and Virtues. Saturn governs this plant. It is exceeding cold, and of a very dangerous quality, conſequently muſt not be applied internally. It is of good effect for inflammations, tumours, and ſwelling of any part of the body, the privities excepted; alſo St. Anthony's fire, wheals, puſhes, and creeping ulcers, proceeding from hot ſharp humours, by cooling and repelling the heat. The leaves bruiſed, and laid to the brow or forehead, are good for thoſe whoſe eyes are red and ſwelled, and for cleanſing them of web or film growing thereon. If the root is roaſted in embers, afterwards wrapped in double wet papers, and then applied to any part afflicted with the gout, it will ſpeedily remove the pain thereof. Should any perſon unfortunately, through miſtake, eat the herbage of this plant inſtead of parſley, or the root inſtead of a parſnip, (both bearing a great reſemblance to each other,) it will certainly cauſe a phrenſy or ſtupefaction of the ſenſes; I will recommend to the patient the ſtrongeſt and beſt wine they can procure, and to drink it immediately, before the ill effects of the herb ſtrike to the heart. If wine cannot be inſtantly had, Pliny adviſeth to take a good draught of ſtrong vinegar, which he affirms to be a ſovereign remedy.

## HEMP.

IT is ſo common a plant, and ſo well known by almoſt every reſident of this kingdom, that a deſcription of it would be altogether ſuperfluous.

Time. It is ſown about the latter end of March or beginning of April, and is ripe in Auguſt and September.

Government and Virtues. It is under the dominion of Saturn. The ſeed conſumeth wind, but if uſed too liberally it drieth up the natural ſeed for procreation, though, being boiled in milk, and taken a little at a time, it is a good remedy for a dry cough. An emulſion made of the ſeed is given with good ſucceſs for the jaundice, eſpecially in the beginning of the diſeaſe, if there be no ague accompanying it, for it openeth obſtructions of the gall, and cauſeth digeſtion of choler; it ſtayeth laſks and continual fluxes, eaſeth the cholic, allayeth the troubleſome humours of the bowels, and ſtayeth bleeding at the mouth, noſe, or any other place; it will deſtroy the worms either in man or beaſt, and, by dropping the juice into the ears, it will kill the worms and bring forth earwigs or other inſects gotten therein. The decoction of the root allayeth inflammations, eaſeth the pains of the gout, the hard tumours or knots in the joints, the pains and ſhrinkings of the ſinews, and the pains of the hips. The freſh juice, mixed with a little oil and butter, is an exceeding good cure for burns.

## HEN-BANE.

Description. THE common hen-bane hath very large, thick, ſoft, woolly, leaves, lying upon the ground, much cut or torn on the edges, of a dark, ill, greyiſh-green, colour; from among theſe riſe up ſeveral thick and ſhort ſtalks, two or three feet high, ſpread into many ſmaller branches with leſs leaves thereon, bearing ſmall yellow flowers, which ſcarcely appear above the huſks; they are uſually torn on the one ſide, ending in five round points growing one above another, of a dead yellowiſh colour, ſomewhat paler towards the edges, with many purpliſh veins, and of a dark yellowiſh purple colour at the bottom of the flower, with a ſmall pointel of the ſame colour in the middle; each of them ſtands in a hard cloſe huſk, ſomewhat like thoſe of aſarabaca, and rather ſharp at the top points, containing much ſmall ſeed, very like poppy-ſeed, but of a duſky greyiſh colour. The root is large, white, and thick, branching forth many ways under ground, not much unlike a parſnip, except in colour, and is, together with the plant, of a very ſtrong, diſagreeable, and offenſive, ſmell.

Place. It generally groweth near pathways, and the under ſides of hedges and old walls.

Time. It bloſſoms in July, and ſpringeth annually from its own ſowing; though many believe it to flower much earlier.

Government and Virtues. It is a Saturnine plant. The leaves are good for cooling hot inflammations in the eyes, or other parts of the body; and, being boiled in wine, and uſed as a foment, it will aſſuage all manner of ſwellings, either in the ſcrotum, women's breaſts, and other parts of the body; alſo the gout, ſciatica, and pains of the joints, if proceeding from a hot cauſe. Being applied with vinegar to the forehead and temples, it helpeth the head-ach, and cauſeth thoſe to ſleep who are prevented by hot violent fevers. The oil of the ſeed is good for deafneſs, and noiſe and worms in the ears. The juice of the herb or ſeed, or the oil drawn from the ſeed, will anſwer all the aforeſaid purpoſes.

## HEDGE-HYSSOP.

Description. THERE are ſeveral ſorts of this plant, the firſt of which is a native of Italy, and only reared here by the curious. Two or three kinds however grow wild in England, two of which I ſhall here mention; viz. The firſt is a low ſmooth plant, not quite a foot high, of a very bitter taſte, compoſed of many ſquare ſtalks, diverſely branched from the bottom to the top; it has many joints, ſhooting forth at each two ſmall leaves; theſe are rather broader at the bottom than at the top, a little dented on the edges, of a ſad green colour, and full of veins. The flowers ſtand alſo at the joints, being of a fair purple colour with white ſpots, and made very much like thoſe of dead-nettle; the ſeed is ſmall and yellow, and the roots ſpread much under ground.

The ſecond ſeldom grows more than half a foot high, ſhooting forth ſeveral ſmall branches, whereon grow many ſmall leaves ſet one againſt the other, ſomewhat broad, but very ſhort; the flowers are not much unlike the former in ſhrpe, but of a pale reddiſh colour; the ſeed is ſmall and yellowiſh, and the root ſpreadeth like that of the firſt.

Place. They grow in wet low grounds, and by water-ſides, and the latter ſort may be found amongſt the bogs on Hampſtead Heath.

Time. They generally flower in June, July, and Auguſt, and the ſeed ripens preſently after.

Government and Virtues. They are under the dominion of Mars. They are very unſafe to take inwardly, unleſs well rectified by an alchymiſt, and only the purity of them given, as they are violent purgers, eſpecially of choler and phlegm. Being prepared, they are very good for the dropſy, gout, and ſciatica; externally applied in ointments, or the belly anointed therewith, they deſtroy worms therein, and are an excellent remedy for old and filthy ſores.

## BLACK HELLEBORE.

IT is called alſo fetter-wort, fetter-graſs, bears foot, Chriſtmas-herb, and Chriſtmas-flower.

Description. It hath many fair green leaves riſing from the root, each of them ſtanding about a ſpan high from the ground; the leaves are all divided into ſeven, eight, or nine, parts, dented from the middle to the point on both ſides, and remain green all the winter. About Chriſtmas time, if the weather be ſomewhat temperate, the flowers appear upon footſtalks, each compoſed of five large round, white, leaves, which are ſometimes purple towards the edges, with many pale yellow thrumbs in the middle. The ſeed is divided into ſeveral cells, ſomewhat like thoſe of columbines, but rather larger; the ſeed is long and round, and of a black colour. The root conſiſts of numberleſs blackiſh ſtrings all united into one head. There is likewiſe another ſpecies of black hellebore which frequently grows in woods and foreſts, very much like this, except that the leaves are ſmaller and narrower. It periſheth in the winter.

Place. The firſt is cultivated in gardens; the ſecond is commonly found in the woods in Northamptonſhire.

Time. The former bloſſoms in December and January; and the latter in February and March.

Government and Virtues. It is an herb of Saturn, conſequently would be taken with greater ſafety after being purified than when raw. The roots are very effectual againſt all melancholic diſeaſes, eſpecially ſuch as are of long ſtanding, as quartan agues and madneſs; it helpeth the falling ſickneſs, the leproſy, the yellow and black jaundice, the gout, ſciatica, and convulſions; or, uſed as a peſſary, provoketh the terms exceedingly. The ſame being beaten to a powder, and ſtrewed upon foul ulcers, conſumes the dead fleſh and inſtantly heals them; it will alſo help gangrenes by taking inwardly twenty grains thereof corrected with half as much cinnamon. Country people uſe it for the cure of ſuch beaſts as are troubled with the cough, or have taken any poiſon, by boring a hole through the ear and putting a piece of the root therein; this, they ſay, will give relief in twenty-four hours time. It is an excellent ingredient, and uſed by farriers for many purpoſes.

## HERB-ROBERT.

Description. IT grows up with a reddiſh ſtalk about two feet high, bearing on long and reddiſh footſtalks many leaves; theſe are divided at the ends into three or five diviſions, ſome cut deeper than others, and alſo dented on the edges, which oftentimes turn of a reddiſh colour. At the top of the ſtalk grow ſeveral flowers, each conſiſting of five leaves, much larger than thoſe of dove's foot, and of a deeper red colour, after which come beak-heads as in others. The root is ſmall and thready, and of an unpleaſant ſmell.

Place. It may be found near way-ſides, ditch-banks, and waſte grounds.

Time. It flowers in June and July, and the ſeed is ripe ſoon after.

Government and Virtues. This herb is under the dominion of Venus. It is eſteemed an excellent remedy for the ſtone, and will ſtay blood, from whatever cauſe it might happen to flow; it ſpeedily healeth all green wounds, and is effectual in curing old ulcers in the privities and other parts.

## HERB-TRUELOVE.

Description. ORDINARY herb-truelove hath a ſmall creeping root running near the upper cruſt of the ground, ſomewhat like a couch-graſs root, but not ſo white, ſhooting forth ſtalks with leaves, ſome of which carry ſmall berries, and others not; every ſtalk ſmooth, without joints, and of a blackiſh green colour, riſing about half a foot high if it bears berries, but not ſo high if otherwiſe; on the top are four leaves ſet directly one againſt the other, reſembling a croſs, or rather a ribbon tied in a truelove's knot, from whence it took its name; theſe leaves are ſomewhat like the leaves of night-ſhade, but a little broader, having ſometimes three leaves, ſometimes five, and frequently ſix, ſome of which are larger than others. From the middle of the four leaves riſeth up one ſmall ſlender ſtalk, about an inch high, bearing on the top a flower ſpread open like a ſtar, conſiſting of four ſmall and long narrow pointed leaves of a yellowiſh green colour, with four ſmaller ones lying between, and in the middle ſtands a round, dark, purpliſh, button, or head, compaſſed about with eight ſmall yellow mealy threads of three colours, which form a beautiful flower; when the other leaves are withered, the button or head in the middle becomes a blackiſh purple berry about the ſize of a grape, full of juice, and contains many white ſeeds. The whole plant is without taſte.

Place. It grows in woods and coppices, eſpecially about Chiſlehurſt and Maidſtone in Kent, and is likewiſe frequently found in the corners and borders of fields, and other waſte grounds.

Time. They ſpring up about April or May, and flower ſoon after; the berries are ripe in the end of May and June.

Government and Virtues. This plant is claimed by Venus. The leaves or berries hereof are effectual to expel poiſons of all ſorts, eſpecially that of the aconites, alſo the plague, and other peſtilential diſeaſes. The roots beaten to powder, and taken in wine, give eaſe to thoſe who are troubled with the cholic; the leaves are exceeding good for green wounds, as alſo to cleanſe and heal up old filthy ſores and ulcers. It is very powerful to diſcuſs all tumours and ſwellings in the ſcrotum, privities, or groin, or in any other part of the body, and ſpeedily allays all inflammations. The leaves or juice applied to felons, or nails of the hands or feet that have impoſthumes or ſores gathered together at the roots or under them, will prove a certain cure in a ſhort time.

## HYSSOP.

IT is ſo univerſally known, that I conſider it altogether needleſs to write any deſcription of it. Its virtues are theſe.

Temperature and Virtues. The herb is Jupiter's, under the ſign Cancer, conſequently ſtrengthens ſuch parts of the body as theſe govern. Dioſcorides ſaith, that hyſſop boiled with rue and honey, and drunk, helpeth thoſe who are troubled with coughs, ſhortneſs of breath, wheezing, and rheumatic diſtillations of the lungs; taken with oxymel, it expelleth groſs humours by ſtool, and with honey it killeth worms in the belly; alſo, with freſh or new figs bruiſed, it helpeth to looſen the belly, but more effectually if the root of flower-de-luce be added thereto. It reſtoreth the natural colour of the ſkin when diſcoloured by the yellow jaundice, and being taken with figs and nitre it helpeth the dropſy and ſpleen. Being boiled in wine, it is good to waſh inflammations, and taketh away black and blue ſpots and marks proceeding from blows, bruiſes, or falls, if applied with warm water. Being boiled with figs, it makes an excellent gargle for the quinſey or ſwelling in the throat; or boiled in vinegar and gargled in the mouth it cureth the tooth-ach; the hot vapours of the decoction, taken by a funnel in at the ears, eaſeth the inflammations and ſinging noiſe of them; bruiſed and mixed with ſalt, honey, and cummin-ſeed, it is a good remedy for the ſtinging of ſerpents; the head being anointed with the oil thereof, it killeth the lice and allayeth the itching of the ſame; it helpeth the falling ſickneſs, and expelleth tough phlegm, and is effectual in all cold griefs or diſeaſes of the cheſt and lungs, being taken either as a medicine or ſyrup. The green herb bruiſed and a little ſugar mixed therewith, will ſpeedily heal up any cut or green wound, being thereto applied.

## HOPS.

THE matured hops are ſo well known, that I ſhall decline writing a deſcription, and ſhall therefore proceed to that of the wild hops.

Description. The wild hop groweth up like the tame, twining upon trees and hedges that ſtand near it; it hath rough branches and leaves like the former, but much ſmaller heads; theſe heads are ſo ſcarce, that one ſtalk ſeldom produces more than one or two;---in this the chiefeſt difference conſiſts.

Place. They delight to grow on low moiſt grounds, and are found in moſt parts of this kingdom.

Time. They ſpring up in April, and flower about the latter end of June, but the heads are not gathered till the latter end of September.

Government and Virtues. It is under the dominion of Mars. This phyſically operates in opening obſtructions of the liver and ſpleen, cleanſing the blood, looſening the belly, expelling the gravel, and provoking urine; the decoction of the tops of hops, whether tame or wild, worketh theſe effects. In cleanſing the blood, they help to cure the French diſeaſe, and all manner of ſcabs, itch, and other breakings-out of the body; alſo tetters, ringworms, and ſpreading ſores, the morphew, and all diſcolourings of the ſkin. The decoction of the flowers and tops helpeth to expel poiſon. Half a drachm of the ſeed in powder, taken in drink, killeth worms in the body, bringeth down women's courſes, and expelleth urine. A ſyrup, made of the juice and ſugar, cureth the yellow jaundice, eaſeth the head-ach proceeding from heat, and tempereth the heat of the liver and ſtomach; it is likewiſe given with good effect to thoſe who are afflicted with long and hot agues. Both the wild and the manured are of one property, and alike effectual in all the aforeſaid diſorders. Mars owns this plant, conſequently its operations are obvious.

## HOARHOUND.

DESCRIPTION. COMMON hoarhound groweth up with ſquare hoary ſtalks, about half yard or two feet high, ſet at the joints with two round crumpled rough leaves, of a dull hoary-green colour, of a tolerably pleaſant ſmell, but very bitter taſte. The flowers are ſmall, white, and gaping, ſet in rough, hard, prickly, huſks; theſe, together with the leaves, ſurround the joints from the middle of the ſtalk upwards, and are ſucceeded by ſmall, round, blackiſh ſeed. The root is blackiſh, hard, and woody, with many ſtrings, and very durable.

PLACE. It is found in moſt parts of this kingdom, eſpecially in dry grounds, and waſte green places.

TIME. It generally bloſſoms in and about July, and the ſeed is ripe in Auguſt.

GOVERNMENT AND VIRTUES. It is an herb of Mercury. A decoction of the dried herb with the ſeed, or the juice of the green herb taken with honey, is a certain remedy for thoſe who are purſey or ſhort-winded, or have a cough, or are fallen into a conſumption, either through long ſickneſs, or thin diſtillations of rheum upon the lungs. It helpeth to expectorate tough phlegm from the cheſt, being taken with the roots of iris, or oris. It bringeth down the menſtrua, expelleth the afterbirth, and giveth eaſe to thoſe who are afflicted with long and painful travail; and is an excellent medicine to expel poiſon, or cure the venomous bitings or ſtingings of ſerpents, &c. The leaves uſed with honey, purge foul ulcers, ſtay running or creeping ſores, the growing of the fleſh over the nails, and eaſe the pains of the ſides. The juice thereof, uſed with wine and honey, helpeth to clear the eyeſight, and, ſnuffed up the noſtrils, purgeth away the yellow-jaundice; the ſame uſed with a little oil of roſes and dropped into the ears, eaſeth the pains thereof. Galen ſays, it openeth obſtructions both of the liver and ſpleen, and purgeth the breaſt and lungs of phlegm; or, outwardly applied, it both cleanſeth and digeſteth. Mathiolus alſo obſerves a decoction of this plant to be infinitely ſerviceable for thoſe who have bad livers, and for ſuch as have itches and running tetters. Either the powder or the decoction hereof is effectual in killing worms. The green leaves, bruiſed and boiled in old hog's greaſe, and uſed as an ointment, heal the bitings of dogs, abate the ſwellings of women's breaſts, and eaſe the painful ſwellings occaſioned by thorns or ſplinters, and, uſed with vinegar, cleanſe and heal tetters. There is a ſyrup made of this plant ſold by moſt apothecaries, which I would recommend as an excellent help to evacuate tough phlegm and cold rheum from the lungs of aged perſons, eſpecially thoſe who are aſthmatic or ſhort-winded.

## HORSE-TAIL.

OF this there are many kinds, but I ſhall decline troubling my readers with the deſcription of any other than the moſt eminent.

Description. The great horſe-tail, at the firſt ſpringing, hath heads ſomewhat like aſpargus, which afterwards grow to be hard, rough, hollow, ſtalks, jointed in ſeveral places, and about a foot high; the lower part appearing to be put into the upper. On each ſide grows a buſh of ſmall, long, ruſh-like, hard, leaves, each part reſembling a horſe's tail, (from whence it took its name.) At the tops of the ſtalks come forth ſmall catkins, ſomewhat like thoſe of trees. The root creeps under the ground, having many joints.

Place. This horſe-tail (as do moſt of the other kinds hereof) generally groweth in moiſt and wet grounds.

Time. They ſpring up in April, and their catkins bloom in July; in Auguſt they ſhed their ſeed, and then periſh, riſing afreſh every ſpring.

Government and Virtues. Of this herb, the ſmooth rather than the rough, and the leafed rather than the bare, are moſt phyſical. Saturn claims dominion over it, yet its qualities are very harmleſs. It is very good to ſtaunch bleedings, either inwardly or outwardly, the juice or decoction thereof being drunk, or externally applied. It ſtays laſks and fluxes of every kind, either in men or women; ſuppreſſes the evacuation of blood through the urinary paſſages, and healeth not only the inward ulcers and excoriations of the entrails, bladder, &c. but all other ſorts of foul, moiſt, and running, ulcers, and quickly healeth green wounds. It is an excellent cure for ruptures in children. The decoction, taken in wine, provoketh urine, and helpeth the ſtone and ſtranguary; and a ſmall quantity of the diſtilled water thereof, drunk two or three times in a day, eaſeth the diſagreeable ſenſations of the bowels, and is effectual againſt a cough when proceeding from the diſtillation of the head. By bathing the parts affected with the warm juice or diſtilled water of this plant, it cureth hot inflammations, puſtules, red wheals, and other breakings-out, of the ſkin; and it eaſeth all ſwellings, heat, and inflammations, of the fundament and privities of either ſex.

## HOUSELEEK.

IT is too well known, as well by the name of ſengreen as houſeleek, to require any deſcription.

Place and Time. It grows commonly on the tops of houſes and walls, and flowereth in July.

Government and Virtues. Jupiter claims dominion over this herb, from which it is fabulouſly reported, that it preſerves whatever it grows upon from fire and lightning. The ordinary houſeleek is good for all inward and outward heats, either in the eyes or other parts of the body. A poſſet made with the juice of houſeleek is ſingularly good in all hot agues, for it cooleth and tempereth the blood and ſpirits, and quencheth thirſt; by dropping the juice thereof into the eyes, it cureth them of all hot defluxions of ſharp and ſalt rheums, and is equally effectual for all diſorders of the ears, being uſed in the ſame manner. It ſtoppeth the immoderate floodings of the menſtrua, and helpeth the humours of the bowels; it cooleth and abateth all hot inflammations, the St. Anthony's fire, ſcaldings, burnings, the ſhingles, fretting ulcers, cankers, tetters, ring-worms, and the like; and is a certain eaſe to thoſe who are afflicted with the gout, when proceeding from a hot cauſe. By bathing the hands and feet with the juice, and laying the ſkin of the leaves on them afterwards, it cleanſeth them of warts and corns; it alſo eaſeth the head-ach and diſtempered heat of the brain, occaſioned by phrenſies or want of ſleep, being applied to the temples and forehead. The leaves, bruiſed and laid upon the crown of the head, ſtay the bleeding of the noſe very quickly. The diſtilled water of the herb is likewiſe profitable for all the aforeſaid purpoſes. The leaves, being gently rubbed on any place ſtung with nettles or bees, do quickly take away the pain, and diſcharge the bliſters proceeding therefrom.

## HOLLY.

CALLED alſo holm or hulver-buſh. It is ſo well known that to give a deſcription of it is quite needleſs.

Government and Virtues. This tree is of a Saturnine quality; the berries expel wind, and are therefore eſteemed good for removing the pains of the cholic; they are of a ſtrong nature; for, by eating a dozen of them in the morning faſting, when they are ripe, and not dried, they purge the body of groſs and clammy phlegm; but, if you dry the berries and beat them into powder, they are binding; they ſtop fluxes of every kind, as alſo the terms of women. Both the bark and leaves are exceeding good to be uſed in fomentations for broken bones and diſlocated members*.

## HOUND's TONGUE.

Description. The great ordinary hound's tongue hath many long and ſomewhat narrow, ſoft, hairy, darkiſh-green, leaves, lying on the ground, and not much unlike thoſe of bugloſs; from among theſe riſeth up a rough hairy ſtalk, about two feet high, with ſmaller leaves thereon, and branches at the top into many parts, bearing at the foot of each a ſmall leaf; on this branch are many ſmall flowers, which conſiſt of ſmall purpliſh-red leaves, of a dead colour, ſcarcely riſing out of the huſk wherein they ſtand, with a few threads in the middle. It hath ſometimes a white flower. After the flowers are fallen, there follow rough flat ſeeds, with a ſmall pointel in the middle, eaſily cleaving to any thing it happens to touch. The branch whereon theſe flowers grow is crooked, or turned inwards, before they are in bloſſom, but ſtraightens itſelf as the flowers come to perfection. The root is black, thick, and long, hard to break, and full of clammy juice, ſmelling ſomewhat ſtrong and diſagreeable, as do alſo the leaves.

Place. It groweth in moſt parts of this kingdom, in waſte grounds, untilled places, highway-ſides, and under hedges.

Time. It generally flowereth in the months of May and June, and the ſeed is ripe ſhortly after.

Government and Virtues. It is a plant under the dominion of Mercury. The root is very effectually uſed in pills and decoctions, or otherwiſe, to ſtay all ſharp and thin defluxions of rheums from the head into the eyes or noſe, or upon the ſtomach or lungs, as alſo for coughs and ſhortneſs of breath. The leaves boiled in wine, (though many approve of water,) with oil and ſalt added thereto, mollify and open the belly downwards, and help to cure the biting of a mad dog, by applying the leaves to the wound. Bruiſing the leaves, or the juice of them boiled in hog's lard, and applied, helpeth to preſerve the hair from falling, and eaſeth the pain of a ſcald or burn; or the bruiſed leaves, laid to any green wound, ſpeedily heal the ſame. The root baked in embers, wrapped in paſte, or wet papers, or in a wet double cloth, and a ſuppoſitory made thereof and applied to the fundament, doth very effectually help the piles or hemorrhoids; alſo the diſtilled water of the herb and root is uſed with good effect for all the aforeſaid purpoſes, either taken inwardly or applied outwardly, eſpecially as a waſh for wounds and punctures, and particularly ulcers occaſioned by the venereal diſeaſe.

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* The method of making Birdlime.---Peel as much of the bark of holly as you have occaſion for, in the months of June and July; let it boil ſeven or eight hours, or till it is tender, in clear water; then make a heap with fern, ſtrewing a lay of one and a lay of another. This ſort of poſition the chymiſts term *ſtratum ſuper ſtratum*, and mark it thus, S. S. S. Let it ferment a fortnight or three weeks; then take it out, and beat it in a mortar till it may be kneaded like dough; then waſh it in water till it becomes clean.---This is pure birdlime.

## St. JOHN's WORT.

Description. THE common St. John's wort ſhooteth forth browniſh, upright, hard, round, ſtalks, two feet high, ſpreading many branches from the ſides up to the top, with two ſmall dark-green leaves ſet one againſt another, ſomewhat like thoſe of the ſmaller centaury, but narrower, and full of ſmall holes, which can ſcarcely be diſcerned unleſs held up towards the light. At the tops of the ſtalks and branches ſtand yellow flowers, each compoſed of five leaves, with many yellow threads in the middle, which, being bruiſed, yield a reddiſh juice like blood; theſe are ſucceeded by ſmall round heads containing ſmall blackiſh ſeed, ſmelling like roſin. The root is hard and woody, with many ſtrings and fibres, and of a browniſh colour; they live many years, ſhooting afreſh yearly.

Place. It groweth in woods and coppices, as well thoſe that are ſhady as thoſe that are open and expoſed to the ſun.

Time. They flower about midſummer, and their ſeed is ripe in the latter end of July and Auguſt.

Government and Virtues. It is under the celeſtial ſign Leo, and governed by the Sun. It is by no means the leaſt valuable for its efficacy in the cure of wounds, hurts, or bruiſes, by being boiled in wine and drunk, if the complaint is inwardly, or, if outwardly, by converting it into an oil, ointment, bath, or lotion. It openeth obſtructions, diſſolves ſwellings, cloſes up the lips of wounds, and ſtrengthens the parts that are weak and feeble. The decoction of the herb and flowers, (though that of the ſeed is preferable,) taken in wine, or the ſeed made into powder and drunk with the juice of knot-graſs, helpeth all manner of vomiting and ſpitting of blood, occaſioned by the burſting of a vein, bruiſes, falls, &c. It likewiſe helpeth thoſe who are bitten or ſtung by any venomous creatures; alſo eaſeth the pain of the ſtone, and, when applied, provoketh women's courſes. Two drachms of the ſeed of this herb beaten to powder and drunk in a little broth, gently expel choler or congealed blood from the ſtomach. The decoction of the leaves and ſeeds, being drunk rather warm before the ague-fits come on, in the courſe of a little time will entirely remove them. Drinking the decoction of the ſeed for forty days together helpeth the ſciatica, the falling ſickneſs, and the palſy.

## IVY.

THIS is too well known to require a deſcription.

Place. It may be found upon moſt old ſtone walls of churches, houſes, and ruinous buildings, and frequently in woods and upon trees.

Time. It flowereth in July, but the berries do not ripen till they have felt the winter froſts.

Government and Virtues. It is under the dominion of Saturn. Dioſcorides recommends about a drachm of the flowers to be taken twice a-day in red wine as an excellent medicine for the laſk and bloody flux. It is very pernicious to the nerves and ſinews being taken too liberally, but particularly helpful when externally applied. Pliny obſerves, that the yellow berries are good againſt the jaundice, and help thoſe who ſpit blood; alſo prevent drunkenneſs; and that the white berries, being either inwardly or outwardly applied, kill the worms in the belly. The ſame beaten to powder, and taken in liquor for two or three days together, admirably help thoſe who have the plague, or, taken in wine, break the ſtone, provoke urine, and bring down the menſtrua. The freſh leaves of ivy, boiled in vinegar, and applied warm to the ſides of thoſe that are troubled with the ſpleen, ach, or ſtitch in the ſides, give immediate eaſe; or, uſed with roſe-water and oil of roſes to bathe the temples and forehead, eaſe the head-ach, though of long continuance. The ſame, boiled in wine, cleanſe and heal old and filthy ulcers, by uſing it as a waſh; it is likewiſe an excellent cure for green wounds, burnings, ſcaldings, and all kinds of exulcerations coming thereby, or by ſalt phlegm or humours in other parts of the body. The juice of the berries or leaves, ſnuffed up the noſe, purgeth the head and brain of thin rheum which cauſeth defluxions into the eyes and noſe, and cureth the ulcers and ſtench therein; the ſame dropped into the ears, helpeth the old running ſores of them. By the continual drinking out of a cup made of ivy, all ſymptoms of the ſpleen are entirely erazed. The ſpeedieſt cure for a ſurfeit by wine, is to drink a draught of the ſame liquor wherein a handful of bruiſed ivy-leaves have been boiled.

## JUNIPER-BUSH.

THIS is equally as well known as the former, conſequently a deſcription would be equally needleſs.

Place. They are very plentiful in moſt woods and commons, particularly upon Warley-common, near Brentwood in Eſſex; upon Finchley common, without Highgate; adjacent to the Newfound Wells near Dulwich; upon a common between Mitcham and Croydon; in the highway near Amerſham in Buckinghamſhire; and in many other places.

Time. The berries are not ripe the firſt year, but continue green two ſummers and one winter before they ripen, when they change their colour to black; they are ripe about the fall of the leaf.

Government and Virtues. This admirable ſolar ſhrub can ſcarcely be equalled for its virtues. Its berries are hot in the third degree, and dry in the firſt, being an excellent counter-poiſon and a great reſiſter of peſtilence; they are very good for the bitings of venomous beaſts; they provoke urine exceedingly, and therefore are very available in diſuries and ſtranguaries. It is ſo powerful a remedy for the dropſy, that, by drinking only the lye made of the aſhes of this herb, it cures the diſeaſe; it provokes the terms, helps the fits of the mother, ſtrengthens the ſtomach, and expels wind; indeed there are few better remedies for the wind and cholic than the chymical oil drawn from the berries; but, as many, in all probability, would be at a loſs how to extract this oil, I would adviſe them to eat ten or dozen of the ripe berries every morning faſting, as theſe will occaſionally anſwer the aforeſaid purpoſes; they are alſo good for a cough, ſhortneſs of breath, conſumption, pains in the belly, ruptures, cramps, and convulſions; they ſtrengthen the brain, help the memory, fortify the ſight by ſtrengthening the optic nerves, and give ſafe and ſpeedy delivery to women in labour; they are excellent good in all ſorts of agues, they help the gout and ſciatica, and ſtrengthen all the limbs of the body. The aſhes of the wood are a ſpecial remedy for the ſcurvy in the gums, by rubbing them therewith; the berries ſtay all fluxes, help the hemorrhoids or piles, and kill worms in children; they break the ſtone, procure loſt appetite, and are very good for palſies and falling ſickneſs. A lye made of the aſhes of the wood, and the body bathed therewith, cures the itch, ſcabs, and leproſy.

## JUJUBE-TREE.

Names and Kinds. DODONEUS ſays, there are two ſorts of jujubes; red and white; and of the red three different kinds, viz. the greater jujube-tree, called in Latin *zizipbus ſive jujuba major*; the ſmaller jujube, called *zizipbus ſive jujuba minor*; and the wild jujube-tree.

Description. The greater jujube-tree grows ſometimes very high, but oftener ſpreads itſelf in breadth, having a crooked body; the wood is hard and whitiſh, the bark rugged, and the branches great and ſpreading; the ſmaller twigs about a foot long and full of leaves on both ſides, one a little above another, and an odd one at the end; theſe leaves are ſmall, broad, and pointed at the end; finely dented about the edges, with long veins in them, each ſtanding on a long footſtalk, ſmooth, and feel hard. At the foot of every leaf, towards the tops of the twigs, come forth ſmall yellowiſh flowers, each conſiſting of five leaves; theſe are ſucceeded by the fruit, which is ſomewhat like a ſmall plumb, or olive, but rather long, green and harſh at the firſt; afterwards they become yellowiſh, and when ripe they are of a fine red colour, of a ſharp ſweetneſs, and ſomewhat clammy; flattiſh next the ſtalk, containing a ſtone not unlike that of the olive or Cornelian cherry; and its ſkin is thicker and harder than that of the plumb. The branches are thorny, ſtanding two always at a joint, one whereof is crooked, the other ſtraight: the roots are long and faſt in the earth.

The ſmaller jujube-tree is, in branches, leaves, flowers, and fruit, very much like the former, except that it is every way ſomewhat ſmaller; it is alſo thick ſet with thorns like the other, but theſe are rather ſhorter.

The wild jujube-tree is lower, and more like a ſhrub, than either of the former, but thicker ſet with ſmall ſharp thorns; the leaves are not unlike, but grow not ſo thick on a twig, and are ſmaller; the fruit of this is alſo red, ſomewhat leſs, drier of ſubſtance, and of a ſharper taſte, than the others.

PLACE. The firſt groweth naturally in Africa, Egypt, and moſt eaſtern countries, and was, as Pliny obſerves, conveyed from thence into Italy, where it now grows in great plenty. The other kinds are likewiſe found in Italy, and in ſome parts of France, the wild kind growing in the fields and hedges.

TIME. They flower in May, and their fruit is generally ripe in September.

GOVERNMENT AND VIRTUES. Venus claims dominion over theſe. Jujube-berries, when freſh, open the body, purge choler, and cleanſe the blood, as Simon Sethi and Actuarius affirm, though Mathiolus poſitively denies their purging faculty. They are of a temperate quality in heat and moiſture; they cool the heat and ſharpneſs of the blood, and therefore are good in hot agues, alſo to expectorate tough phlegm and other diſeaſes of the cheſt and lungs, as coughs, ſhortneſs of breath, hot diſtillations, &c. and, being taken in ſyrups or electuaries, expel the roughneſs of the throat and breaſt. They are good to cleanſe the reins and bladder, their viſcous qualities making the paſſages ſlippery, and expelling the gravel and ſtone with infinitely leſs pain; and they ſtay vomiting when cauſed by ſharp humours. They are hard of digeſtion, being either freſh or dry, and therefore are uſed in decoctions, ſyrups, or electuaries. I ſhall here preſent my readers with a moſt valuable receipt for the cure of all ſharp humours, ulcers, or inflammations, in the kidneys, reins, and bladder; and for the ſtone, jaundice, falling ſickneſs, and dropſy.---It is thus prepared: Take jujubes, the ſeed of parſley, fennel, anniſe, and carraways, of each one ounce; of the roots of parſley, burnet, ſaxifrage, and carraway, one ounce and a half; let the ſeed be bruiſed; and the roots waſhed and cut ſmall, then infuſe them all night in a bottle of white wine, and in the morning boil it in a cloſe earthern veſſel until a third part be conſumed; ſtrain it, and drink four ounces at a time, the firſt and laſt thing morning and evening, abſtaining from all other drink for at leaſt three hours.---This you will find effectual for the aforeſaid diſorders.

## HONEY-WORT.

THERE are divers ſpecies of the honey-wort, namely, the great, ſmall, and the rough; as, the greater yellow and red; the greater yellow or purple; and the ſmaller yellow and white; the flowers of all or either of which the bees are remarkably fond of, and much delighted with.

Description. The greater honey-wort groweth up upon a thick green ſtalk, to a moderate height, having many great, deep-pointed, green, leaves, placed one above another; towards the top of each ſtalk come umbels of flowers, thick ſet, and riſing up ſpiral or creſted; moſtly of a bright yellow colour; though ſome are red, others purple, and ſome perfectly white.

Place. The honey-worts grow not wild in England, but are cheriſhed up in gardens, and planted in the pleaſure grounds and nurſeries of the curious.

Time. They ſpring up in April; and flower from the latter end of May to Auguſt, but periſh in the winter.

Government and Virtues. Honey-worts are under Mercury. They are of temperate quality, between cold and hot; but rather inclining to cold, and are ſomewhat aſtringent. They ſtop bleeding at the mouth and noſe, immoderate fluxes of the belly, and women's courſes. The juice of the herb, with a little ſaffron diſſolved in it, is an excellent remedy for weak, watery, or blear, eyes; and is uſed to heal foul ulcers after they have been cleanſed, particularly in tender parts of the body. Some people uſe it inſtead of bugloſs and borage, in all caſes where thoſe herbs are recommended. The flowers are very ſweet.

## INDIAN LEAF.

Names. IT is called by the Indians *cadegi Indi*, that is *folium Indum*. It is alſo called *malabathrum*, and by the Eaſt-Indians *tamala patra*.

Description. They are broad leaves, compoſed of three ribs, and a little pointed at the ends; amongſt theſe are other leaves which ſometimes grow on the branches, two uſually at a joint, taſting ſomewhat hot, like the bay-leaf, as does likewiſe the bark; among theſe leaves is ſometimes found a ſmall fruit, very much reſembling an acorn in the cup; this is probably the fruit of the tree, and gathered with the leaves.

Government and Virtues. It is a ſolar plant; the virtues of it are theſe: it provokes urine, it warms and ſtrengthens the ſtomach exceedingly, and makes the breath ſweet. It is good to put into cordial and ſtomachic compoſitions; it reſiſteth poiſon and venom, and the infuſion thereof in warm wine helpeth inflammations and redneſs of the eyes.

## KIDNEY-WORT.

CALLED alſo wall-pennyroyal, and wall-pennywort.

Description. It hath many thick, flat, and round, leaves, growing from the root, every one having a long footſtalk faſtened underneath about the middle of it, a little unevenly waved ſometimes about the edges, of a pale-green colour, and hollow on the upper ſide, like a ſaucer. From among theſe riſe one or more tender, hollow, ſmooth, ſtalks, about half a foot high, bearing thereon two or three ſmall leaves, not round like thoſe below, but ſomewhat long and divided on the edges; the tops are ſometimes divided into long branches, bearing a number of flowers, ſet round about a long ſpike, one above another; they are hollow and ſhaped like a ſmall bell, and of a whitiſh-green colour; theſe are followed by ſmall heads containing very ſmall browniſh ſeed, which, falling on the ground, ſpring up in great plenty before the winter, if it happens to fall on a moiſt ſoil. The root is round and ſmooth, greyiſh without and white within, having ſmall fibres at the head of the root and bottom of the ſtalk.

Place. It grows in great abundance in many parts of this kingdom, particularly in the weſtern, upon ſtone and mud walls, upon rocks and ſtony ground, at the foot and often on the trunks of rotten trees.

Time. It uſually flowereth in the beginning of May, and the ſeed, ripening quickly after, ſheddeth itſelf. About the end of the ſame month the leaves and ſtalks begin to wither, and remain in that ſtate till September, when the leaves ſpring up again and abide green all the winter.

Government and Virtues. Venus claims this herb under Libra. The juice or diſtilled water, being drunk, is very effectual for all inflammations and unnatural heats; alſo to cool a fainting ſtomach, a hot liver, or heat in the bowels. The bruiſed herb or the diſtilled water thereof applied to pimples, redneſs, St. Anthony's fire, or other inflammations proceeding from heat, quickly healeth the ſame; it likewiſe eaſeth the pains of the kidneys occaſioned by the fretting of the ſtone, provokes urine, is available for the dropſy, helpeth to break the ſtone, cooleth inflamed parts, eaſeth the pains of the bowels, and ſtoppeth the bloody flux. It is a ſingular remedy for the painful piles, or hemorrhoidal veins, by bathing the affected parts with the juice thereof, or uſing it as an ointment; and is effectual in eaſing pains of the hot gout, the ſciatica, and the inflammations and ſwellings of the ſcrotum; it cureth the kernels or knots in the neck or throat, called the king's evil; it healeth kibes and chilblains by waſhing them with the juice, or anointing them with an ointment made thereof, laying at the ſame time ſome of the ſkin of the leaf upon them. It is alſo uſed in green wounds, to ſtay the blood and heal them.

## KNAP-WEED.

Description. THE common ſort of knap-weed hath many long and ſomewhat broad dark-green leaves, riſing from the root, deeply dented about the edges, and ſometimes a little rent or torn on both ſides in two or three places, and ſomewhat hairy; from among theſe groweth up a ſtrong round ſtalk, four or five feet high, which is divided into many branches; at the tops of theſe ſtand large green ſcaly heads, bearing in the middle many dark purpliſh red thrumbs or threads; theſe are ſucceeded by black ſeed, wrapped in down, ſomewhat like that of the thiſtle, but ſmaller. The root is white, hard, and woody, with many fibres annexed thereto; it periſheth not, but liveth during the winter, ſhooting forth freſh leaves every ſpring.

Place. It grows frequently in fields and meadows, but chiefly in borders and hedges, and may be found on waſte grounds.

Time. It is generally in bloſſom about June and July, and the ſeed is ripe ſhortly after.

Government and Virtues. Saturn claims dominion over this herb. It helpeth to ſtay fluxes, bleeding at the noſe and mouth, or other outward parts, and cloſeth broken blood-veſſels; it ſtayeth the diſtillations of thin and ſharp humours from the head upon the ſtomach and lungs; it is good for thoſe who are bruiſed by a fall, blow, or otherwiſe; it is very profitable for ruptures, by drinking the decoction of the herbage and root in wine, and applying the ſame outwardly to the place; it is exceeding good for all running ſores, cankerous and fiſtulous, drying up the moiſture, and healing them gradually; and is an admirable remedy for a ſore throat, ſwelling of the uvula and jaw, and all green wounds.

## KNOT-GRASS.

IT is ſo univerſally known, that a deſcription would be quite unneceſſary.

Place. It grows in almoſt every part of this kingdom, by the highway ſides, by the footpaths in fields, and by the ſides of old walls.

Time. It grows up late in the ſpring, and remains green till the winter, when all the branches periſh.

Government and Virtues. Saturn appears to have dominion over this herb, though many are of opinion it is influenced by the Sun. The juice of the common kind of knot-graſs is very effectual to ſtay bleeding at the mouth and noſe, by drinking it in ſteeled or red wine for the one, or applied to the forehead or ſquirted up the noſtrils for the other. It is no leſs effectual to cool and temper the heat of the blood and ſtomach; alſo to ſtay fluxes of blood and humours, as the laſk, bloody flux, women's courſes, and running of the reins. It is a ſingular provocative of urine, it helps the ſtranguary, and allayeth the heat proceeding therefrom; and, by taking a drachm of the powder of the herb in wine, for ſeveral days together, it powerfully expels the gravel or ſtone from the kidneys and bladder. Being boiled in wine and drunk, it healeth the wounds made by the bitings of venomous creatures, effectually ſtays all defluxions of rheumatic humours upon the ſtomach, kills the worms in the belly, and eaſes the inward pains that proceed from the heat, ſharpneſs, and corruption, of blood and choler. The diſtilled water of this herb taken by itſelf, or with the powder of the plant or ſeed, will equally anſwer all the aforeſaid purpoſes, and is held in high eſtimation for its admirable efficacy in cooling all manner of inflammations, breakings-out, hot ſwellings and impoſthumes, gangrenes, fiſtulous cankers, ulcers and ſores in the privities of either ſex, and all kinds of freſh and green wounds, and quickly healeth them, being waſhed therewith. The juice, dropped into the ears, cleanſeth ſuch as are foul and have running matter therein, and is very good for broken joints and ruptures.

## KALI.

Names and Kinds. It is called alſo glaſs-wort and ſalt-wort: there are four kinds of kali deſcribed by Parkinſon, *viz.* 1. *Kali majus cochleatum*, great glaſs-wort with ſnail-like ſeed. 2. *Kali minus album*, ſmall glaſs-wort. 3. *Kali Ægyptiacum*, glaſs-wort of Egypt. And 4. *Kali geniculatum, ſive ſalicornia*, jointed glaſs-wort. I ſhall only deſcribe the laſt.

This jointed kali, or glaſs-wort, groweth up uſually but with one upright, round, thick, and almoſt tranſparent, ſtalk, a foot high or more; thick ſet, and full of joints or knots, without any leaves at all, but ſhooting forth joints one out of another, with

ſhort

ſhort cods at the heads of them, and ſuch-like ſmaller branches on each ſide, and they are divided into other ſmaller ones; it is thought to bear neither flower nor ſeed; the root is ſmall, long, and thready. Some other kinds there are differing ſomewhat in the form of the joints, and one kind wholly reddiſh, and differing from the other in nothing elſe.

The firſt and third are abſolute ſtrangers in our countries, but grow in Syria, Egypt, Italy, and Spain; the ſecond groweth, not only in thoſe countries, but in colder climates, upon many places of our own coaſts, eſpecially of the weſt country. The laſt generally groweth in all countries, in many places of our ſea-coaſt, where the ſalt-water overfloweth.

Time. They all flouriſh in the ſummer, and thoſe that periſh give their ſeed in Auguſt, or later; the laſt abideth all the winter.

Government and Virtues. Kali, or glaſs-wort, all the ſorts thereof are under the dominion of Mars; they are all of a cleanſing quality, without any great or manifeſt heat; the powder of any of them, or the juice, which is much better, taken in drink, purgeth downwards flegmatic, wateriſh, and aduſt, melancholy humours, and therefore is very effectual for the dropſy, to provoke urine, and expel the dead child. It opens ſtoppings of the liver and ſpleen, and waſtes the hardneſs thereof; but it muſt be uſed with diſcretion, as a great quantity is dangerous, hurtful, and deadly.

The aſhes are very ſharp and biting like a cauſtic, and the lye that is made thereof is ſo ſtrong, that it will fetch off the ſkin from the hands or any part of the body, but may be mixed with other more moderate medicines to take away ſcabs, leproſy, and to cleanſe the ſkin: the powder of ſtones, and the aſhes hereof, being melted, is the matter whereof glaſs is made, which, when it gloweth in the furnace, caſteth up a fat matter on the top, and when it is cold is fat and brittle, and is called ſandiver.

It worketh much to the ſame effect with the herb or aſhes; it is uſed often in powder to blow into horſes' eyes, or, being diſſolved, to be ſquirted in them, to take away any ſuperfluous film or ſkin beginning to grow thereon: both of them likewiſe ſerve to dry up running ſores, ſcabs, tetters, ringworms, and to help the itch.

## LADIES' MANTLE.

Description. IT hath many leaves riſing from the root, ſtanding upon long hairy footſtalks, being almoſt round, but a little cut in on the edges into eight or ten parts more or leſs, making it ſeem like a ſtar, with ſo many corners and points, and dented round about, of a light green colour, ſomewhat hard in handling, as if it were folded or plaited at firſt, and then crumpled in divers places; and a little hairy, as the ſtalk is alſo, which riſeth up among them to the height of two or three feet, with ſuch-like leaves thereon, but ſmaller, and, being weak, is not able to ſtand upright, but bendeth down to the ground, divided at the top into two or three ſmall branches, with ſmall and yellowiſh green heads, and flowers of a whitiſh colour breaking out of them, which being paſt, there cometh ſmall yellow ſeed like poppy-ſeed; the root is ſomewhat long and black, with many ſtrings or fibres.

Place. It groweth naturally in many paſtures and woodſides, in Hartfordſhire, Wiltſhire, and Kent, and other places of this land.

Time. It flowereth in May and June, and remains green all the winter.

Government and Virtues. Venus claims the herb as her own. Ladies' mantle is very proper for thoſe wounds that have inflammation, and is very effectual to ſtay bleedings, vomiting, fluxes of all ſorts in men or women, and bruiſes by falls or otherwiſe, and helpeth ruptures; it is alſo good for ſome diſorders in women's breaſts, cauſing them to grow leſs and hard, being both inwardly and outwardly applied. The diſtilled water, taken for twenty days together, helpeth conception; and a bath, made of the decoction of the herb, will ſometimes prevent miſcarriages. It is one of the moſt uſeful wound-herbs, and therefore highly prized and praiſed by the Germans, who, in all wounds, inward and outward, drink the decoction thereof, and waſh the wounds therewith, or dip tents therein, and put them into the wounds. It quickly healeth green wounds, not ſuffering any corruption to remain behind; and it cureth old ſores, though fiſtulous and hollow.

## LAVENDER.

IT is ſo well known, being an inhabitant of almoſt every garden, that it needeth no deſcription.

Time. It flowereth about the end of June and the beginning of July.

Government and Virtues. Mercury owns the herb, and it carries its effects very potently. Lavender is of ſpecial uſe for pains of the head and brain that proceed of a cold cauſe, as the apoplexy, falling ſickneſs, the drowſy or ſluggiſh malady, cramps, convulſions, palſies, and often faintings. It ſtrengthens the ſtomach, and freeth the liver and ſpleen from obſtructions, provoketh women's courſes, and expelleth the dead child and after-birth. The flowers of lavender ſteeped in wine are efficacious in obſtructions of urine, or for thoſe troubled with the wind or cholic, if the places be bathed therewith. A decoction made with the flowers of lavender, hoarhound, fennel, and aſparagus roots, and a little cinnamon, is uſed to help the falling ſickneſs and giddineſs of the brain: to gargle the mouth with the decoction thereof is good for the tooth-ach. Two ſpoonfuls of the diſtilled water of the flowers taken help them that have loſt their voice; as alſo the tremblings and paſſions of the heart, and faintings and ſwoonings, not only being drunk, but applied to the temples or noſtrils; but it is not ſafe to uſe it where the body is replete with blood and humours, becauſe of the hot and ſubtile ſpirits wherewith it is poſſeſſed. The chymical oil drawn from lavender, uſually called oil of ſpike, is of ſo fierce and piercing a ſpirit, that it is cautiouſly to be uſed, ſome few drops being ſufficient to be given with other things, either inwardly or outwardly.

## LAVENDER COTTON.

IT being a common garden herb, I ſhall forbear the deſcription; only take notice that it flowereth in June and July.

Government and Virtues. It is under the dominion of Mercury. It reſiſteth poiſon, putrefaction, and helps the bitings of venomous beaſts: a drachm of the powder of the dried leaves, taken every morning faſting, in any convenient vehicle, ſtops the running of the reins in men, and whites in women: the ſeed being beaten into powder, and taken as wormſeed, kills worms: the like doth the herb itſelf, being boiled in milk, and the milk drunk: ſcabs and itch are cured by bathing with a decoction of it.

## LADIES' SMOCK, OR CUCKOO-FLOWER.

Description. THE root is compoſed of many ſmall white threads, from tender dark-green leaves, ſet one againſt another upon a middle rib, the greateſt being at the ends, among which riſe up divers tender, weak, round, green, ſtalks, ſomewhat ſtraked, with longer and ſmaller leaves upon them; on the tops of which ſtand flowers, almoſt like ſtock-gilliflowers, but rounder and not ſo long, of a bluſhing white colour: the ſeed is reddiſh, and groweth in ſmall pouches, being of a ſharp biting taſte, and ſo is the herb.

Place. They grow in moiſt places and near to brook ſides.

Time. They flower in April or May, and the lower leaves continue green all the year.

Government and Virtues. They are under the dominion of the moon, and very little inferior to water-creſſes in all their operations: they are very good for the ſcurvy: they provoke urine and break the ſtone, and excellently warm a cold and weak ſtomach, reſtoring loſt appetite and helping digeſtion.

## LETTUCE.

Government and Virtues. THE moon owns it. The juice of lettuce mixed or boiled with oil of roſes, and applied to the forehead and temples, procureth ſleep and eaſeth the head-ach proceeding from a hot cauſe; being boiled and eaten, it helpeth to looſen the belly: it helpeth digeſtion, quencheth thirſt, increaſes milk in nurſes, eaſeth griping pains of the ſtomach or bowels that come of choler. It abateth bodily luſt, being outwardly applied with a little camphire: applied in the ſame manner to the region of the heart, liver, or reins, or by bathing the ſaid place with the juice or diſtilled water wherein ſome white ſanders or red roſes are put alſo, it not only repreſſeth the heat and inflammation therein, but comforts and ſtrengthens thoſe parts, and alſo tempereth the heat of urine. Galen adviſeth old men to uſe it with ſpices, and, where ſpices are wanting, to add mint, rocket, and ſuch-like hot herbs, or elſe citron, lemon, or orange, ſeeds, to abate the cold of one and heat of the other. The ſeed and diſtilled water of the lettuce work the like effects in all things: but the uſe of lettuce is chiefly forbidden to thoſe that are ſhort-winded, or have any imperfection in their lungs, or ſpit blood.

## WATER-LILY.

OF this there are two principal noted kinds, viz. the white and yellow.

Description. The white lily hath very large and thick dark green leaves lying on the water, ſuſtained by long and thick foot-ſtalks, that riſe from a great, thick, round, and long, tuberous black root, ſpungy or looſe, with many knobs thereon, like eyes, and whitiſh within, from the midſt of which riſe other the like thick and great ſtalks, ſuſtaining one large white flower thereon, green on the outſide, but as white as ſnow within, conſiſting of divers rows of long and ſomewhat thick and narrow leaves, ſmaller and thinner the more inward they be, encompaſſing a head within, with many yellow threads or thrums in the middle, where, after they are paſt, ſtand round poppy-like heads, full of broad, oily, and bitter, ſeed.

The yellow kind is little different from the former, only it hath fewer leaves on the flowers, greater and more ſhining ſeed, and a whitiſh root both within and without: the roots of both being ſomewhat ſweet in taſte.

Place. They are found growing in great pools and ſtanding waters, and ſometimes in ſlow running rivers, and ditches of running water, in ſundry places of this land.

Time. They flower moſt commonly about the end of May, and their ſeed is ripe in Auguſt.

Government and Virtues. The herb is under the dominion of the moon, and therefore cools and moiſtens like the former. The leaves and flowers of the water-lilies are cold and moiſt, but the root and ſeed are cold and dry; the leaves cool all inflammations, and both outward and inward heats of agues, and ſo do the flowers.

## WHITE LILIES.

IT being unneceſſary to deſcribe a plant ſo common as to be met with in almoſt every flower-garden, ſuffice it to detail their

Government and Virtues. They are under the dominion of the moon, and, by antipathy to Mars, expel poiſon; they are exceedingly uſed in peſtilential ſevers, the roots being bruiſed and boiled in wine, and the decoction drunk, expelling the poiſon to the exterior parts of the body; the juice of it, being tempered with barley-meal baked, and eaten as ordinary bread, is an excellent cure for the dropſy. An ointment made of the root and hog's-lard is very good for ſcald heads, and unites the ſinews when cut; it hath alſo great virtues in cleanſing ulcers, it being of a fine ſuppurating quality; the root, boiled in any convenient decoction, gives ſpeedy delivery to women in travail, and expels the after birth. The root, roaſted and mixed with a little hog's-lard, makes an excellent poultice to ripen and break plague-ſores. The ointment is alſo extremely good for ſwellings in the privities and cures burns and ſcalds without leaving any ſcar; and is a preventive againſt baldneſs.

The decoction of the white or yellow lilies, made of the ſeeds, roots, or leaves, is ſingularly efficacious in reſtraining nocturnal pollution, occaſioned by dreams.

## LILY OF THE VALLEY.

CALLED alſo conval-lily, May-lily, and lily confancy.

Description. The root is ſmall, and creepeth far in the ground, as graſs roots do; the leaves are many; amongſt which riſeth up a ſtalk half a foot high, with many white flowers like little bells, with turned edges, of a ſtrong though pleaſing ſmell; the berries are red, and not much unlike thoſe of aſparagus.

Place. They grow plentifully upon Hampſtead-heath, and in various other places in this kingdom.

Time. They flower in May, and the ſeed is ripe in September.

Temperature and Virtues. It is under the dominion of Mercury, and therefore without doubt, ſtrengthens the brain, renovates a weak memory, and makes it ſtrong again. The diſtilled water, dropped into the eyes, helps inflammations thereof, as alſo that infirmity, which they call pin and web: the ſpirit of the flowers, diſtilled in wine, reſtoreth loſt ſpeech, helps the palſy, and is exceeding good in the apoplexy, comforteth the heart and vital ſpirits. Gerrard ſaith, that, the flowers being cloſe ſtopped up in an ant-hill, and taken away again a month after, a liquor will be found in the glaſs, which being externally applied, tends to relieve the gout.

## LIQUORICE.

Description. THE Engliſh liquorice ſhoots up with ſeveral woody ſtalks, whereon are ſet, at ſeveral diſtances, many narrow, long, green, leaves, ſet together on both ſides of the ſtalks, and an odd one at the end, nearly reſembling a young aſh-tree ſprung up from the ſeed. This by many years continuance in a place without removal, but not elſe, will bring forth numerous flowers ſtanding together ſpike-faſhion, one above another upon the ſtalks, in the form of pea-bloſſoms, but of a very pale-blue colour which turn into long, ſomewhat flat, and ſmooth, pods, wherein is contained ſmall, round, hard, ſeed. The root runneth down exceeding deep in the ground, with divers other ſmaller roots and flowers growing with them; they ſhoot out ſuckers in every direction, by which means the product is greatly increaſed. The root is of a browniſh colour on the outſide, and yellow within.

Place. It is planted in fields and gardens in divers places of this kingdom, greatly to the profit of the cultivators.

Government and Virtues. It is under the dominion of Mercury. Liquorice boiled in clear water, with ſome maiden-hair and figs, maketh a good drink for ſuch as are troubled with a dry cough, hoarſeneſs, wheeſing, or ſhortneſs of breath, and for all complaints of the breaſt and lungs, phthſic, or conſumptions, cauſed by the diſtillation of ſalt humours on them. It is alſo good in all pains of the reins, the ſtranguary, and heat of urine. The fine powder of liquorice blown through a quill into the eyes of thoſe afflicted with the pin and web, as it is called, or rheumatic diſtillations into them, cleanſes and greatly relieves them. The juice of liquorice is as effectual in all the diſeaſes of the breaſt and lungs, the reins and bladder, as the decoction. The juice diſſolved in roſe-water, with ſome gum tragacanth, is a fine medicine for hoarſeneſs, wheeſing, &c.

## LIVER-WORT.

Description. THE common liver-wort groweth cloſe, and ſpreadeth much upon the ground, in moiſt and ſhadowy places, with numerous ſad-green leaves, or rather, as it were, ſticking flat one to another, very unevenly cut in on the edges, and crumpled, from among which ariſe ſmall ſlender ſtalks, an inch or two high at moſt, bearing ſmall flowers at the tops, ſomewhat like ſtars.

Government and Virtues. It is under the command of Jupiter, and under the ſign Cancer. It is a ſingular good herb for all diſeaſes of the liver, both to cool and cleanſe it, and helpeth inflammations in any part; it is likewiſe ſerviceable in the yellow jaundice; being bruiſed and boiled in ſmall beer, and drunk, it cooleth the heat of the liver and kidneys, and helpeth the running of the reins in men and the whites in women; it is a ſingular remedy to ſtay the ſpreading of tetters, ring-worms, and other fretting and running ſores and ſcabs, and is excellent for thoſe whoſe livers are corrupted by ſurfeits, which cauſe their bodies to break out, for it fortifies the liver exceedingly, and makes it impregnable.

## LOOSE-STRIFE, OR WILLOW HERB.

Description. THE common yellow looſe-ſtrife groweth to the height of four or five feet, with great round ſtalks a little creſted, diverſly branched, from the middle to the tops, into great and long branches, on all of which, at the joints, there grow long and narrow leaves, but broader below, and uſually two at a joint, yet ſometimes three or four, ſomewhat like willow leaves, ſmooth on the edges, and of a faint-green colour; from the upper joints of the branches, and at the tops of them alſo, ſtand many yellow flowers of five leaves a piece, with divers yellow threads in the middle, which turn into ſmall round heads, containing ſmall cornered ſeeds. The root creepeth under ground, almoſt like couch-graſs, but greater, and ſhooteth up every ſpring, with browniſh heads, which afterwards grow up into two ſtalks; it hath no ſcent nor taſte, but only aſtringent.

Place. It groweth in moſt parts of the kingdom, in moiſt meadows, and by the ſides of water.

Time. It flowereth from June to Auguſt.

Government and Virtues. This herb is good for all manner of bleeding at the mouth or noſe, or wounds; all fluxes of the belly, as well as the bloody flux, given either to drink or adminiſtered as a clyſter; it ſtayeth alſo the abundance of women's courſes. It is a ſingular good herb for green wounds, to ſtay the bleeding, and quickly cloſes together the lips of the wound, if the herb be bruiſed, and the juice only applied. It is often uſed in gargles for ſore mouths, as alſo for the ſecret parts. The ſmoke hereof, on its being burned, driveth away flies and gnats, which are uſed in the night-time to infeſt the habitations of people dwelling near marſhes, and in the fenny countries.

LOOSE-

## LOOSE-STRIFE, with ſpiked Heads of Flowers.

Description. THIS groweth with many woody ſquare ſtalks, full of joints, about three feet high at leaſt, at every one whereof are two long leaves, ſhorter, narrower, and of a darker-green colour, than the former, and ſomewhat browniſh. The ſtalks are branched into many long ſtems of ſpiked flowers, half a foot long, growing in bundles one above another, out of ſmall huſks very like the ſpiked heads of lavender, each of which flowers has five round-pointed leaves of a purple violet colour, or ſomewhat inclining to redneſs, in which huſks ſtand ſmall round heads after the flowers are fallen wherein is contained ſmall ſeed; the root creepeth under ground like unto the yellow, but is greater than it; and ſo are the heads of the leaves when they firſt appear out of the ground, and more brown than the other.

Place. It groweth uſually by rivers, and ditch ſides in wet grounds, as about the ditches at and near Lambeth, and in many other parts of the kingdom.

Time. It flowereth in the months of June and July.

Government and Virtues. The herb is an herb of the moon, and under the ſign Cancer; it is an excellent preſervative of the ſight when well; nor is there a better cure for ſore eyes than eye-bright taken inwardly, and this uſed outwardly; it is cold in quality. This herb is not a whit inferior to the former, it having not only all the virtues which the former hath, but ſome peculiar virtues of its own found out by experience; namely, the diſtilled water is a preſent remedy for hurts and blows on the eyes, and for blindneſs, if the chryſtalline humours be not periſhed or hurt; and this hath been ſufficiently proved true by the experience of a perſon of judgment, who kept it long to himſelf as a great ſecret; it alſo cleareth the eyes of duſt or any thing which may have got into them, and preſerveth the ſight; it is alſo a good remedy for wounds and thruſts, being made into an ointment in the following manner: To every ounce of the water add two drachms of May butter without ſalt, and of ſugar and bee's wax the ſame quantity of each, which muſt boil gently all together; when thus brought to a proper conſiſtence, let tents be dipped in the ointment after it is cold, and put into the wounds, and the place covered with a linen cloth doubled, on which the ointment may be thinly ſpread; this is an approved medicine. It likewiſe cleanſeth and healeth all foul ulcers and ſores whatſoever, by waſhing them with the water, and laying on them a green leaf or two in the ſummer, or dry leaves in the winter. This water, when warmed, and uſed as a gargle, or even drunk ſometimes, cures the quinſey, or king's evil in the throat. The ſaid water applied warm taketh away ſpots, marks, and ſcabs, in the ſkin; and a little of it drunk quencheth extraordinary thirſt.

## LOVAGE.

Description. IT hath many long and great ſtalks, with large winged leaves, divided into many parts like ſmallage, but much larger and greater, every leaf being cut about the edges, broadeſt forwards, and ſmalleſt at the ſtalk, of a ſad-green colour, ſmooth and ſhining: from among which riſe up ſundry ſtrong hollow green ſtalks, five or ſix feet, and ſometimes ſeven or eight feet, high, full of joints, but ſmaller leaves ſet on them than grow below; and with them, toward the tops, come forth long branches, bearing at their tops large umbles of yellow flowers, and after them flat browniſh ſeed. The root groweth thick, great, and deep, ſpreading much, and enduring long, of a browniſh colour on the outſide, and whitiſh within. The whole plant, and every individual part of it, ſmelleth ſtrong and aromatically, and is of an hot, ſharp, biting, taſte.

Place. It is uſually planted in gardens, where, if it be ſuffered, it groweth huge and great.

Time. It flowereth in the end of July, and ſeedeth in Auguſt.

Government and Virtues. It is an herb of the ſun, under the ſign Taurus. If Saturn offend the throat, (as he always doth if he be the occaſion of the malady, and in Taurus in the geneſis,) this is your cure. It openeth, cutteth, and digeſteth, humours, and mightily provoketh women's courſes and urine; half a drachm at a time of the dried root in powder, taken in wine, doth wonderfully warm a cold ſtomach, helping digeſtion, and conſuming all raw and ſuperfluous moiſture therein; eaſeth all inward gripings and pains, diſſolveth wind, and reſiſteth poiſon and infection. To drink the decoction of this herb is a well-known and much-practiſed remedy for any ſort of ague, and greatly helps the pains and torments of the body and bowels occaſioned by cold. The ſeed is effectual to all the purpoſes aforeſaid, except the laſt, and worketh more powerfully. The diſtilled water from the herb helpeth the quinſey in the throat, if the mouth and throat be gargled and waſhed therewith; and relieveth the pleuriſy being drunk three or four times. When dropped into the eyes, it taketh away the redneſs or dimneſs of them; it alſo taketh away ſpots or freckles in the face. The leaves bruiſed, and fried with a little hogs-lard, applied hot to any blotch or boil, will quickly break it.

## LOVE-APPLE.

IT is alſo called golden apple, apple of love, and in Latin *poma amoris*.

Description. It groweth into a tree of a reaſonable height, with large dented leaves, cut in upon the edges, and of a pale-green colour. The bloſſoms are large and white, which falling, the fruit follows.

Place. The tree is a native of Ethiopia; but it is planted in the gardens or nurſeries of many of the curious in this kingdom.

Time. They bloſſom in April and May, and the fruit is ripe in Auguſt and September.

Government and Virtues. The apples of love are under Venus; yet are they cold and moiſt in an extreme degree. They are olygotrophic and cacochymic; yet in hot countries, they are eaten as ſauce, boiled with pepper, ſalt, and oil. The juice, boiled in uxungia to a ſalve, heals all inflammations and burnings; and the leaves boiled with oil-olive, till criſped, then ſtrained, and afterwards boiled with wax, roſin, and a little turpentine, to a ſalve, are an infallible remedy for old ſores and ulcers of the privities, or for wounds and ulcers in other parts of the body, coming of heat, or viſcous humours of the blood.

## LUNG-WORT.

Description. This is a kind of moſs that groweth on ſundry ſorts of trees, eſpecially oak and beech; with broad, greyiſh, tough, leaves, diverſely folded, crumpled, and gaſhed in on the edges, and ſometimes ſpotted alſo with many ſmall ſpots on the upper ſide; it was never ſeen to bear any ſtalk, or flower at any time.

Government and Virtues. Jupiter ſeems to own this herb, which is greatly uſed by phyſicians to help the diſeaſes of the lungs, and for coughs, wheeſings, and ſhortneſs of breath, which it cureth both in man and beaſt; it is very ſucceſsfully uſed in lotions that are taken to ſtay the moiſt humours that flow to ulcers, which hinder their healing; as alſo to waſh all other ulcers in the privy parts of man or woman.

It is an excellent remedy, boiled in beer, for broken-winded horſes.

## LARCH-TREE, and its AGARIC.

Description and Names. IT grows about Italy, and alſo in Aſia. It is called *larix* both in Greek and Latin; and alſo *agaricum*, and *agaricus*; the agaric is an excreſcence, or kind of muſhroom, that groweth on this tree, being within white, ſoft, and ſpongy, like a muſhroom. The agaric is hot in the firſt degree, and dry in the ſecond; it hath an attenuating cleanſing quality, and purges obſtructions of the entrails by ſtool; it purgeth phlegm, choler, and melancholy, and cleanſeth the breaſt, lungs, liver, and reins; provokes urine and the terms; kills worms, helps pains of the joints, and cauſeth a good colour.

It is not good to be taken alone, without corrigents; therefore the ſyrup of roſes, ſolutive with agaric, is good to be taken; it cures the yellow jaundice, and is exceeding good for agues coming of thick humours, for which they take pills of hiera with agaric; it may be given with oxymel for agues of all ſorts, and gripings of the belly; it is good againſt ſhortneſs of breath, the phthiſic, and conſumption; half a drachm thereof in wine is an excellent antidote againſt poiſons.

## LENTILES.

Kinds and Names. THEY are called *lens*, and *lenticula*, in Latin. In ſome counties of England, where they ſow them for meat for their cattle, they call them tills.

There are three ſorts. 1. *Lens major*, the greater lentil. 2. *Lens minor*, the ſmaller lentil. And, 3, *Lens maculata*, the ſpotted lentil.

Description. 1. The greater lentil groweth two feet long, with many hard, yet ſlender and weak, branches, from whence, at ſeveral places, ſhoot forth long ſtalks of ſmall winged leaves, many on each ſide of a middle rib, which middle rib endeth in a ſmall claſper; between the leaves and the ſtalks come the flowers, which are ſmall, of a ſad reddiſh colours inclined to purple, almoſt like the flowers of vetches; ſtanding, for the moſt part, two at the end of a long foot-ſtalk; after the flowers are gone, there ſucceed ſmall, ſhort, flat, pods, wherein is flat, round, ſmooth, ſeed, of a pale yellowiſh aſh-colour; the root is fibrous, and dieth every winter.

2. The ſmaller lentil differeth from the former only in this, that the ſtalks, leaves, and ſeed, are leſs; the flowers more pale, and the ſeeds whiter.

The third differs not much from the laſt; but the ſeed is ſpotted with black.

Government and Virtues. They are under the dominion of Saturn; of a mean temperature between heat and cold, and dry in the ſecond degree. According to Galen, they are ſomewhat aſtringent, and bind the body, eſpecially the outward ſkin. It is of contrary qualities, for the decoction thereof doth not bind but looſen the body; therefore, thoſe who would have it bind muſt throw away the firſt water and uſe the ſecond, which ſtops the laſk, and ſtrengtheneth the ſtomach and inward parts.

LEMON-

## LEMON-TREE, OR LEMONS.

Names. There are ſeveral ſorts of lemons: ſome great, others ſmall; ſome having very thick and rugged peels, and ſome very ſmooth; ſome are of a wild juice, others ſharp, and ſome very tart and crabbed; which alterations may be made both by the ſoil and place where they grow or are planted.

1. The ordinary lemon tree is called *malus limonia acida vulgaris.*
2. *Malus limonia acida, cortice tenui*; the thin-rinded ſour lemon.
3. *Malus limonia acida, fructa rotunda*; the ſour round lemon.
4. *Malus limonia dulcis major*; the greater ſweet lemon.
5. *Malus limonia dulcis minor*; the ſmaller ſweet lemon, or civil lemon.
6. *Malus limonia ſilveſtris minima*; the leaſt wild lemon-tree.

Description. 1. The ordinary lemon-tree groweth great and high, with great arms and ſlender branches, long greeniſh thorns; the leaves are long like unto bay leaves, both dented about the edges, and full of holes; the flowers are white and ſweet; the fruit long and round, of a pale yellow colour; and the rind rugged and uneven.

2. All the difference between this and the former is this, that the other is bigger. The rind of this ſecond is of a fine pale-yellow colour, ſmoother than the firſt-mentioned, and thinner; is full of a pleaſant ſharp juice, with ſeeds amongſt it, as the other alſo hath.

3. The tree that beareth the round lemons is in all things like the laſt; only in this, that it hath few or no thorns upon it; and the fruit is like it, having a thin rind, but is ſomewhat rounder, with a ſmall crown at the head.

4. The greater ſweet lemon is greater than any of the former deſcribed lemons; the rind is more ſmooth and yellow; and the juice more ſweet and pleaſant.

5. The civil lemon is of the ſame ſize as the thin-rinded ſour lemon, and ſo like, that it is hard, by the outſide, to know one from the other; but this hath a little deeper-coloured rind, and the juice of a ſweet pleaſant taſte, with a little ſharpneſs.

6. The leaſt wild lemon groweth wild in Syria and Egypt, and beareth very ſmall fruit, no bigger than a pigeon's egg.

Place. Theſe lemons are brought from Spain and ſeveral of their iſlands.

Time. They are evergreens, and never without bloſſoms, green and ripe fruit, throughout the year.

Government and Virtues. The lemons are ſolar, yet of different parts and contrary effects; they are of good uſe to reſiſt poiſon, venom, or infection; an ounce and an half of the juice of unripe lemons, drunk in wine, cleanſeth the kidneys of the ſtone and gravel; and killeth worms in the body, and expelleth them.

An antidote againſt the plague, or any malignant or contagious diſeaſe, is thus prepared: Take four ounces of the pure juice of lemons, ſteep therein an angel of gold, or the weight thereof in leaf-gold, the ſpace of twenty-four hours; then take out the gold, or draw the juice clear from it, and give ſome of it in a draught of wine, with a little of the powder of angelica root, unto any infected with the plague, and, if there be any hopes of recovery, it will help them. The juice of ſweet lemons is neither ſo cooling nor operative as the other. The diſtilled water, drawn from the inner pulp or white ſubſtance of the lemons, cleareth the ſkin and face from freckles and ſpots, provokes urine, and expels the ſtone, by being drunk; helpeth the running ſcab, kills lice in the head, worms in the hands or noſe, and wheals or puſhes in the ſkin. The juice of lemons is good for ſeamen, and others at ſea, to put into their beverage, to prevent the ſcurvy, to which people are much ſubjected in long voyages; it is likewiſe very properly uſed to quench thirſt in warm climates.

An excellent remedy for ſcab and itch: Take a lemon, and cut it through the middle, after putting thereon ſome powder of brimſtone, roaſt it, either againſt the fire, or under ſome embers, as you would do a warden-pear, and therewith rub the parts troubled with itch or ſcabs.

It is alſo the beſt, moſt ſoverign, and clear, remedy to deſtroy thoſe *pediculi inguinales* vulgarly called crab-lice, the parts afflicted with them being rubbed therewith.

## LINE OR LINDEN TREE.

Kinds and Names. OF the line-tree there are accounted two ſorts, the male and the female; and of the female alſo two ſorts, the greater and the ſmaller. It is called in Latin, *tilia*.

Description. 1. *Tilia mas*, the male line, groweth to be a great tree, with large ſpreading boughs, but not ſo much as the female, nor ſo flexible, but harder and more brittle, and of a thicker bark; the leaves are like unto elder-leaves, but ſmaller and longer; and on every one, for the moſt part, grow ſmall bladders full of worms that turn into flies, which, when matured, fly away.

This tree ſeldom beareth either flower or fruit; yet, when it doth bear, it is round flat huſks; many growing cloſe together, each hanging on a long foot-ſtalk by itſelf, with a notch or cleft at the head or end thereof. The wood hereof is more knotty and yellower than that of the female.

2. *Tilia fœmina major.* The greater female line tree groweth to be a larger tree than the former (eſpecially if it happen to be planted in good ground); is covered with a dark-coloured bark, the next thereunto being very pliable to bend, having ſome other thin rinds within that; the leaves are fair and broad, greener, ſmoother, gentler, and rounder, than elm-leaves, and with a longer end; dented about the edges, and of a tolerable good ſcent; at the end of the branches oftentimes, and at the foot of the leaves, ſhoot forth long and narrow whitiſh leaves, along the middle rib whereof ſpringeth out a ſlender long ſtalk, with divers white flowers thereon, ſmelling very ſweet; after which follow ſmall berries, wherein is contained black round ſeed; the wood is whitiſh, ſmooth, and light.

3. *Tilia fœmina minor.* The ſmaller linden-tree is like the laſt in all things, except that it groweth ſmaller in body, leaves, and flowers; the leaves are of a darker green colour, and it beareth no fruit after the flowers.

Place and Time. The greater female kind is planted in many places in this kingdom, in pleaſant walks, it making a large ſweet ſhadow, and uſually flowereth in May. The others are ſeldom to be met with in this iſland.

Government and Virtues. There is no medicinal uſe made of the male linden. The female is under the dominion of Venus, of a moderate temperature, and ſomewhat drying and aſtringent; the decoction of the leaves, got by boiling them in water, is a good lotion to waſh the mouths of young children, or any ſore mouths that have ulcers, bliſters, or cankers, in them. The leaves being pounded or bruiſed, after boiling, and applied to the legs or feet, when ſwelled with the falling down of humours, doth help them; the bark is alſo effectual for the ſame purpoſe.

The flowers of the line-tree and of lilly convally diſtilled together are good againſt the falling ſickneſs; ſo likewiſe is the diſtilled water of the bark; and is alſo ſerviceable againſt thoſe fretting humours which occaſion the bloody flux, and griping in the guts. The water, wherein the inner bark hath been ſteeped till it becomes thick and mucilaginous, and applied with cloths wet therein, helps burnings and ſcaldings.

## LUNG-FLOWER.

THERE are ſeveral ſorts of theſe plants; and they are generally called autumn gentians.

Description. The great autumn gentian riſeth up, according to the richneſs of the ground, higher or lower; ſometimes two feet high, at others not above one foot; ſometimes many, and others fewer, ſtalks; of a browniſh green colour, with many long and narrow dark-green leaves, ſet by couples upon them, up to the tops, which ſeldom branch forth, but bear every one a large hollow flower, in moſt of them of a deep bluiſh purple colour, but in ſome a little paler, ending in five points. The roots are numerous, ſmall, and long, growing deep into the ground, and abiding all the winter.

2. *Gentianella autumnalis fimbriato flore*; autumn gentian of Naples. This creeps up like couch graſs, from a long, yellowiſh, ſmall, root, ſhooting forth a few long and narrow leaves, like thoſe of flax, but ſhorter; but thoſe that grow up to the middle of the ſtalk are larger, and ſmaller again from the middle to the top, two ſet at every joint all along, and ſtriped from every one of the joints, on both ſides, to the top of the ſtalk, which is green, and about a foot high; at the top cometh a purpliſh green huſk, which hath four large-pointed leaves that encloſe the flower, which is long and writhed before it blows, and of a pale-blue colour; but, when it is blown open, it is of a deeper-blue colour, having four leaves ſomewhat long, and as it were purfled about the edges, with a little hairineſs; there is alſo a ſmall leaf at the bottom of each flower, with a few yellow threads in the middle, ſtanding about a head, which groweth to be the ſeed-veſſel, forked into two parts at the head, being greater there than below, and containeth in it very ſmall black ſeed when it is ripe.

3. Autumn gentian, with ſmall centaury leaves, called in Latin *Gentianella autumnalis, centaureæ minoris folio.* This riſeth up with ſundry ſtalks ſcarce a foot high, parted into many ſmall branches, whereon do ſtand two leaves together, very like thoſe of the ſmaller centaury, not ſo long as either of the former, but a little broader and of a lighter green colour; at the tops of the ſtalks and branches grow divers blue flowers, ſet in ſmall long huſks half-way riſing above the tops of them; the ſeed is ſmall, and groweth in long horned veſſels; the root is ſmall and fibrous.

4. There is another ſort with ſmall centaury-like flowers, which is more ſpreading; is ſmall, but hath larger leaves and flowers than centaury; of the ſame colour as the flowers of centaury, yet having more, and laſteth longer. The root, however, periſheth in winter.

5. Another ſmaller gentian, with centaury leaves, is very like the laſt, but ſmaller, and the ſtalks much lower, not being above three inches high, having many ſmall branches, whereon are large blue flowers; the ſeed and veſſels, when they are ripe, are like unto the laſt; the root is alſo ſmall; but hath many more fibres than the others.

PLACE. The firſt is found growing in many parts of Germany, and many other foreign countries; in divers places of this kingdom, viz. at Graveſend; near

Greenhithe; in a chalk-pit not far from Dartford; and at Cobham; all in Kent: it groweth both in wet and dry grounds. The ſecond, upon the hills in Naples, as related by Columna. The third in divers places in Kent, as about Southfleet, and Longfield; alſo in Bedfordſhire; and near Old Verulam in Hartfordſhire. The reſt are ſtrangers here.

Time. Theſe flower not until Auguſt, and thence have the name of autumn gentian.

Government and Virtues. Theſe lung-flowers, or autumn gentian, are alſo under the dominion of Mars, as the gentian or ſelf wort is; and much of the ſame temperature in reſpect to heat and drineſs; and may be uſed both inwardly and outwardly as effectually as gentian; and, where theſe are in plenty, and the other not eaſy to be had, will be found an effiacious ſubſtitute.

They are powerful againſt putrefaction, venom, and poiſon; the Germans account it their treacle, and formerly did make treacle with it, the *ariſtolochia* bay-leaves, and other ingredients, at Jena, from whence it took the name of Jenes-treacle, under which title it was imported into this kingdom; and is an excellent ſpecific for all complaints in the ſtomach; a preventative againſt infection from the plague and all other infectious diſeaſes, and expels the malignity thereof; preferves the heart, and ſtrengthens it againſt faintings and ſwoonings; which treacle was of a bittter taſte: but that which is now commonly uſed by the vulgar people, and generally, by them, called treacle, is very falſely denominated, being nothing elſe than the groſs dregs of ſugar, left after boiling and refining therof, and is properly called molaſſes; which, though no wiſe helpful in any diſeaſe, is yet uſually and greedily deſired and taken by the common people as an univerſal medicine.

The roots of theſe gentians, being made into fine powder, and taken in wine, either by themſelves or with other things, as myrrh, rue, pepper, or the like, is an effectual remedy againſt the bitings or ſtingings of ſerpents, or any other venomous creature, and againſt the bite of a mad dog, being taken three or four days together, and the wound carefully kept open with vinegar and ſalt water, and regularly cleanſed and dreſſed.

The ſame roots, being ſo taken in wine, open all obſtructions of the liver, and help ſuch as are liver grown. It eaſeth pains in the ſtomach, and helpeth ſuch as cannot keep or reliſh their meat, or have loſt their appetite. It refreſheth ſuch as are fatigued with travelling; being ſteeped in wine and drunk, it helps ſuch as are lame in their joints owing to cold or bad lodging; is effectual for pains, ſtitches, and prickings, in the ſides; and is alſo good for thoſe who are bruiſed by falls, it poſſeſſing the virtue of diſſolving congealed blood, and eaſing the pain occaſioned thereby. The root is likewiſe held to be good againſt agues, when taken in any other liquor but wine; the diſtilled water of the herb is equally uſeful.

## LUPINES.

Kinds and Names. There are ſeveral kinds of lupines, as, the great white lupine, called *lupinus ſativus albus*; the ſpotted white lupine, called *lupinus alter albus*; and the ſmalleſt blue lupine, called *lupinus minimus cæruleus.*

Description. 1. The great white lupine riſeth up with a ſtrong, upright, round, woolly, ſtalk, ſet confuſedly with divers ſoſt woolly leaves upon long foot-ſtalks, each being divided into ſeveral parts, narrow, long, and ſoſt, greeniſh on the upper ſide, and woolly underneath; the main ſtalk is divided into two parts, after the flowers are grown from the uppermoſt joint, and are like unto the great garden bean, but wholly white, without any ſpot; after the flowers come long, ſoſt, woolly, ſtalks, containing in them flat white leaves, ſomewhat yellowiſh within, of a very bitter taſte. The root is long, hard, and fibrous, and periſheth every winter.

2. The ſpotted white lupine differeth from the former in the greatneſs and in the flower, which is ſpotted with blue on the head of the innermoſt leaves, and the hollow of the uppermoſt.

3. The ſmalleſt blue lupine is very like the other blue lupine, but ſmaller, both ſtalks and leaves; the flowers are blue, and the ſeed a little ſpotted.

Place. They grow naturally wild, but in England only are planted in gardens.

Time. The lupines flower in July and Auguſt, and the ſeed is ripe ſoon after.

Government and Virtues. Lupines are under the dominion of Mars: and have an opening, cleanſing, diſſolving, and digeſtive, property; but, if they be ſteeped in water until they have loſt their bitterneſs, they may be eaten; however, they are very hard to digeſt, breed groſs humours, and paſs ſlowly through the belly, yet do not ſtop any flux; if they be ſo ſteeped, and afterwards dried and taken with vinegar, they provoke appetite, and help the loathing of the ſtomach to meat. The decoction of lupines, taken with honey, opens obſtructions of the liver and ſpleen, provokes urine and the terms, and expelleth the dead child, when taken with myrrh. It alſo cleareth the body of ſcabs, morphew, cankers, tetters, and running ulcers or ſores; alſo cleanſeth the face; taketh away the marks or pits which the ſmall-pox leaves behind it; and cleareth the ſkin of marks, and black-and-blue ſpots.

An ointment of lupines, to beautify and make the face ſmooth, is made in the following manner: Take the meal of lupines, the gall of a goat or ſheep, juice of lemons, and a little *alumen ſaccharinum*, and mingle them into the form of a ſoft ointment.

The meal of lupines, boiled in vinegar and applied to the parts, taketh away knobs, kernels, or pimples. The ſhells, being burnt, the ſmoke thereof drives away gnats and flies.

## MADDER.

Description. GARDEN-MADDER ſhooteth forth many very long, weak, four-ſquare, reddiſh, ſtalks, trailing on the ground a great way, very rough and hairy, and full of joints, at every one of which come forth divers long and ſomewhat narrow leaves, ſtanding like a ſtar about the ſtalks; rough alſo and hairy, toward the tops whereof come forth many ſmall pale-yellow flowers; after which come ſmall round heads, green at firſt, and reddiſh afterwards, but black when they are ripe, wherein is contained the ſeed. The root is not very great, though about a yard long, ſpreading divers ways, and is of a clear red colour while it is freſh.

Place. It is cultivated in gardens or large fields on account of the profits.

Time. It flowereth toward the end of ſummer, and the ſeed is ripe quickly after.

Government and Virtues. It is an herb of Mars; hath an opening quality, but afterwards binds and ſtrengthens; is an aſſured remedy for the yellow jaundice by opening the obſtructions of the liver and gall, and cleanſing thoſe parts; it openeth alſo the obſtructions of the ſpleen, and diminiſheth the melancholic humour. It is available for the palſy and ſciatica; is effectual for inward and outward bruiſes, and is therefore much uſed in vulnerary drinks. The root, for all thoſe aforeſaid purpoſes, is to be boiled in wine or water, as the caſe requireth, and ſome honey or ſugar put thereunto afterwards. The ſeed hereof, taken with vinegar and honey, helpeth the ſwelling and hardneſs of the ſpleen. The decoction of the leaves and branches is a good fomentation for women to ſit over that have not their courſes. The leaves and roots, beaten and applied to any part that is diſcoloured with freckles, morphew, white ſcurf, or any ſuch deformity of the ſkin, cleanſeth and thoroughly taketh them away.

The root of this madder, holden in the hand, while freſh, will, when a perſon makes water, change it to the colour of blood.

## MAIDEN-HAIR.

Description. THE common maiden-hair doth, from a number of black hard fibres, ſend forth a great many blackiſh ſhining brittle ſtalks, hardly a ſpan long; in many not half ſo long; on each ſide ſet very thick with ſmall round dark-green leaves, ſpotted on the back of them like other ferns.

Place. It groweth much upon old ſtone walls in the weſtern parts of England; in Wales, in Kent, and in divers other places. It is to be found, in great abundance, by the ſides of ſprings, wells, and on the rocky, moiſt, and ſhadowy, places; and is always green.

## WALL-RUE, OR ORDINARY WHITE MAIDEN-HAIR.

Description. THIS hath very fine pale-green ſtalks, almoſt as fine as hairs, ſet confuſedly with divers pale-green leaves on very ſhort foot-ſtalks, ſomewhat ſimilar to the colour of garden-rue, and not much differing in form, but more diverſely cut in on the edges, and thicker; ſmooth on the upper part, and ſpotted finely underneath.

Place. It groweth in many parts of the kingdom; at Dartford, and the bridge of Aſhford, both in Kent; at Beaconsfield, in Buckinghamſhire; on Framlingham caſtle, in Suffolk; on the church-walls at Mayfield, in Suſſex; in Somerſetſhire; and divers other parts. It is green in winter as well as ſummer.

Government and Virtues. Both this and the former are under the dominion of Mercury, and ſo is that alſo which follows after; and the virtues of both are ſo nearly alike, that deſcribing thoſe of the one will equally anſwer the other.

The decoction of the herb maiden-hair, being drunk, relieveth thoſe that are troubled with a cough, ſhortneſs of breath, the yellow jaundice, diſeaſes of the ſpleen, ſtoppage of urine, and helpeth exceedingly to break the ſtone in the kidneys, (in all which caſes the wall-rue is alſo very effectual.) It provoketh women's courſes, and ſtayeth both bleedings and fluxes of the ſtomach and belly, eſpecially when the herb is dry; but, when green, it openeth the body, voideth choler and phlegm from the ſtomach and liver; it cleanſeth the lungs, and by rectifying the blood cauſeth a good colour to the whole body. The herb, boiled in oil of camomile, diſſolveth knots, allayeth ſwellings, and drieth up moiſt ulcers. The lye made thereof is ſingularly good to cleanſe the head from ſcurf, and from dry and running ſores; ſtayeth the falling or ſhedding of the hair, and cauſeth it to grow thick, fair, and well-coloured; for which purpoſe ſome boil it in wine, putting ſome ſmallage-ſeed thereto, and afterwards ſome oil. The wall-rue is as effectual as maiden-hair in all diſeaſes of the head, preventing baldneſs, and cauſing the hair to grow again; and generally for all the aforeſaid diſeaſes. The powder of it, taken in drink for forty days together, helpeth ruptures in children.

## GOLDEN MAIDEN-HAIR.

TO the two former this may be added, which, poſſeſſing the ſame virtues, it is therefore needleſs to repeat them.

Description. It hath many ſmall browniſh-red hairs, to make up the form of leaves, growing about the ground from the root; and in the middle of them, in ſummer, riſe ſmall ſtalks of the ſame colour, ſet with very fine yellowiſh-green hairs on them, and bearing a ſmall gold-yellow head, ſmaller than a wheat-corn, ſtanding in a great huſk. The root is very ſmall and thready

Place. It groweth on bogs and marſhy grounds, and alſo on dry ſhadowy places; at Hampſtead-heath, and elſewhere.

## MALLOWS and MARSH-MALLOWS.

COMMON mallows are generally ſo well known that they need no deſcription.

The common marſh mallows have divers ſoft, hoary, white, ſtalks, riſing to the height of three or four feet, ſpreading forth many branches, the leaves whereof are ſoft and hairy, ſomewhat ſmaller than the other mallow leaves, but longer pointed, cut (for the moſt part) into ſome few diviſions, but deep. The flowers are many, but ſmaller alſo than the other mallows, and white, or tending to a bluſh-colour; after which come ſuch-like round caſes and ſeed as in the other mallows. The roots are many and long, ſhooting from one head, of the bigneſs of a thumb or finger, very pliant, tough and bending, like liquorice, of a whitiſh-yellow colour on the outſide, and more white within, full of a ſlimy juice, which being laid in water, will render it as thick as jelly.

Place. The common mallows grow in every county in the kingdom. The common marſh-mallows grow in moſt of the ſalt marſhes from Woolwich down to the ſea, both on the Kentiſh and Eſſex ſhores, and in many other places.

Time. They are in flower all the ſummer months, and continue till winter.

Government and Virtues. Venus owns them both. The leaves of either of the ſorts before ſpecified, and the roots alſo, boiled in wine or water, or broth with parſley or fennel roots, do help to open the body, and are convenient in hot agues, or other diſtempers of the body; if the leaves, ſo boiled, be applied warm to the belly, it not only voideth hot choleric, and other offenſive, humours, but eaſeth the pains and torments of the belly coming thereby; and are therefore uſed in all clyſters conducing to thoſe purpoſes. The ſame medicine, when uſed by nurſes, procureth them ſtore of milk. The decoction of the ſeed of any of the common mallows, made in milk or wine, doth exceedingly help excoriations, the phthiſic, pleuriſy, and other diſeaſes of the cheſt and lungs that proceed from hot cauſes, if continued to be taken for any length of time. The leaves and root have the ſame effects. They help much alſo in excoriations of the guts and bowels, and hardneſs of the mother, and in all hot and ſharp diſeaſes thereof. The juice drunk in wine, or the decoction of them therein, help women to more ſpeedy and eaſy delivery. Pliny ſaith, that whoever takes a ſpoonful of any of the mallows ſhall that day be free from all diſeaſes whatſoever, and that it is a good ſpecific for the falling-ſickneſs. The ſyrup alſo, and conſerve made of the flowers, are very effectual for the ſame diſeaſes, and to open the body when coſtive. The leaves, bruiſed and laid to the eyes with a little honey, taketh away the impoſthumation of them. The leaves bruiſed or rubbed upon any place ſtung with bees, waſps, or the like, preſently taketh away the pains, redneſs, and ſwellings, that ariſe therefrom. Dioſcorides ſaith, the decoction of the leaves and roots helpeth all ſorts of poiſon, provided the poiſon is directly voided by vomiting. A poultice made of the leaves, boiled and bruiſed, to which is added ſome bean or barley flour, and oil of roſes, is an eſpecial remedy againſt all hard tumours, inflammations, or impoſthumes, ſwellings of the teſticles, and other parts, and eaſeth the pains of them; alſo, againſt the hardneſs of the liver or ſpleen, on being applied to the affected places. The juice of mallows, boiled in old oil, taketh away all roughneſs of the ſkin, as alſo the ſcurf, dandriff, or dry ſcabs, on the head, or other parts, if anointed therewith, or waſhed with the decoction; and preſerveth the hair from falling off. It is alſo effectual againſt ſcaldings and burnings, St. Anthony's fire, and all other hot, red, and painful, ſwellings in any part of the body. The flowers boiled in oil or water (as every one is diſpoſed), with a little honey and alum put thereto, is a excellent gargle to waſh, cleanſe, and heal, any ſore mouth or throat, in a ſhort ſpace. If the feet be bathed or waſhed with the decoction of the leaves, roots, and flowers, it helpeth much the defluxions of rheum from the head. If the head be waſhed therewith, it preventeth baldneſs. The green leaves (ſaith Pliny) beaten with nitre and applied to the part, draw out thorns or pricks in the fleſh; and, in ſhort, there is no wound, external or internal, for which this is not a ſovereign remedy.

The marſh-mallows are moſt effectual in all the diſeaſes before-mentioned. The leaves are likewiſe uſed to looſen the belly gently, and in decoctions for clyſters to eaſe all pains of the body, opening the ſtraight paſſages, and making them ſlippery, whereby the ſtone may deſcend the more eaſily, and without pain, out of the reins, kidneys, and bladder, and to eaſe the torturing pains thereof; but the roots are of more ſpecial uſe for thoſe purpoſes, as well as for coughs, hoarſeneſs, ſhortneſs of breath, and wheeſings, being boiled in wine or honeyed water, and drunk. The roots and ſeeds hereof, boiled in wine or water, are with good ſucceſs uſed by them that have excoriations in the guts, or the bloody flux, by moderating the violence of ſharp fretting humours, eaſing the pains, and healing the soreneſs; it is ſucceſsfully taken by them that are troubled with ruptures, cramps, or convulſion of ſinews; and, when boiled in white wine, for impoſthumes of the throat, commonly called the king's evil, and of thoſe kernels that riſe behind the ears, as well as inflammations or ſwellings in women's breaſts. The dried root, boiled in milk, and drunk, is very good for the chin-cough. Hippocrates uſed to give the decoction of the root, or the juice thereof, to drink, to thoſe that were wounded and ready to faint through loſs of blood; and applied the ſame, mixed with honey and roſin, to the wounds; as alſo the roots, boiled in wine to thoſe that had received any hurt by bruiſes, falls, or blows; or had any bone or member out of joint, or any ſwelling, pain, or ach, in the muſcles, ſinews, or arteries. The mucilage of the roots, and of linſeed and fenugreek put together, is much uſed in poultices, ointments, and plaiſters, to mollify and digeſt all hard ſwellings and the inflammation of them, and to eaſe pains in any part of the body. The ſeed, either green or dry, mixed with vinegar, cleanſeth the ſkin from morphew, and all other diſcolourings, being bathed therewith in the ſun.

## MAPLE-TREE.

Government and Virtues. IT is under the dominion of Jupiter. The decoction either of the leaves or bark greatly ſtrengthens the liver; it is exceeding good to open obſtructions both of the liver and ſpleen; and eaſeth pains of the ſides proceeding from thence.

## WILD MARJORAM.

CALLED alſo *organe*, or *origanum*, baſtard marjoram, and grove marjoram.

Description. Wild or field marjoram hath a root which creepeth much under ground, and continueth a long time, ſendeth up ſundry browniſh, hard, ſquare, ſtalks, with ſmall dark-green leaves, very like thoſe of ſweet marjoram, but harder

and

and ſomewhat broader; at the tops of the ſtalks ſtand tufts of flowers, of a deep purpliſh red colour; the ſeed is ſmall, and ſomething blacker than that of ſweet marjoram.

Place. It groweth plentifully on the borders of corn-fields, and in ſome copſes.

Time. It flowereth toward the latter end of ſummer.

Government and Virtues. This is under the dominion of Mercury. It ſtrengthens the ſtomach and head much, there being ſcarcely a better remedy growing for ſuch as are troubled with a ſour humour in their ſtomach; it reſtores loſt appetite; helps the cough, and conſumption of the lungs; it cleanſeth the body of choler, expelleth poiſon, and remedieth the infirmities of the ſpleen; helps the bitings of venomous beaſts, and ſuch as have poiſoned themſelves by eating hemlock, henbane, or opium; it provoketh urine, and the terms in women; helps the dropſy, ſcurvy, ſcabs, itch, and the yellow jaundice; the juice, being dropped into the ears, relieves deafneſs, pain, and noiſe in the ears. There is a deadly antipathy between this herb and the adder.

## SWEET MARJORAM.

SWEET marjoram is ſo well known, being an inhabitant in every garden, that it is needleſs to write any deſcription either of this, the winter ſweet marjoram, or pot-marjoram.

Place. They grow commonly in gardens, though there are ſome ſorts to be found growing wild, on the borders of corn-fields and paſtures in various parts of the kingdom; yet it would be ſuperfluous to detail them, thoſe produced in gardens being moſt uſeful.

Time. They flower in the end of ſummer.

Government and Virtues. It is an herb of Mercury, under Aries, and is therefore an excellent remedy for the brain, and other parts of the body and mind under the dominion of the ſame planet. The common ſweet marjoram is warming and comfortable in cold diſeaſes of the head, ſtomach, ſinews, and other parts, taken inwardly or outwardly applied. The decoction thereof, being drunk, helpeth all diſeaſes of the cheſt which hinder the freeneſs of breathing, and is alſo ſerviceable in obſtructions of the liver and ſpleen. It helpeth cold complaints of the womb, and the windineſs thereof; alſo the loſs of ſpeech, by reſolution of the tongue. The decoction thereof made with ſome pellitory of Spain and long pepper, or with a little *acorus* or *origanum*, being drunk, is good for thoſe that are beginning to fall into a dropſy, for thoſe who are troubled with a retention of water, and againſt pains and torments in the belly; it provoketh women's courſes, if it be uſed as a peſſary. Being made into powder, and mixed with honey, it taketh away the black marks of blows and bruiſes, by applying it to the part. It is alſo good for inflammations of, and water in, the eyes, being mixed with fine flour, and laid upon them. The juice, dropped into the ears, eaſeth the pains and ſinging noiſe in them. It is of great ſervice when put into thoſe ointments and ſalves that are made to warm and comfort the outward parts, as the joints and ſinews; for ſwellings alſo, and places out of joint. The powder thereof ſnuffed up into the noſe, provoketh ſneezing, and thereby purgeth the brain; when chewed in the mouth, it produceth much phlegm. The oil extracted from this herb is very warm and comfortable to joints and ſinews that are ſtiff and hard, tending to mollify and ſupple them. Marjoram is likewiſe much uſed in all odoriferous waters, powders, &c.

## MARIGOLDS.

THESE, being ſo plentiful in almoſt every garden, are ſo well known, that they need no deſcription.

Time. They flower all the ſummer long, and ſometimes in winter, if it be mild.

Government and Virtues. It is an herb of the Sun, and under Leo. They ſtrengthen the heart exceedingly, are very expulſive, and little leſs effectual, in the ſmall-pox and meaſles, than ſaffron. The juice of marigold leaves mixed with vinegar, by bathing any hot ſwelling therewith, inſtantly giveth eaſe, and aſſuageth the pain. The flowers, either green or dried, are much uſed in poſſets, broths, and drinks, being comfortable to the heart and ſpirits, and expelling any malignant or peſtilential quality which might annoy them. A plaiſter made with the dry flowers in powder, hogs-greaſe, turpentine, and roſin, applied to the breaſt, ſtrengthens and ſuccours the heart greatly in fevers, whether epidemical or not.

## MASTER-WORT.

Description. COMMON maſter-wort hath divers ſtalks of winged leaves divided into ſundry parts, three for the moſt part ſtanding together at a ſmall foot-ſtalk on both ſides of the greater; and three likewiſe at the end of the ſtalk, ſomewhat broad, and cut in on the edges into three or more diviſions, all of them dented about the brims, of a dark-green colour, ſomewhat reſembling the leaves of angelica, but that theſe grow lower to the ground, and on ſmaller ſtalks; among which riſe up two or three ſhort ſtalks, about two feet high, and ſlender, with leaves at the joints ſimilar to thoſe below, but with ſmaller and fewer diviſions, bearing umbels of white flowers; and, after them, ſmall, thin, flat, blackiſh ſeed, larger than dil-ſeeds; the root is ſomewhat greater, and groweth ſlanting into the ground, ſhooting forth ſundry heads, which taſte ſharp, biting the tongue, and is the hotteſt and ſharpeſt part of the plant; the ſeed, next unto it, being ſomewhat blackiſh on the outſide, and ſmelling well.

Place. It is uſually grown in gardens in this kingdom.

Time. It flowereth and ſeedeth about the end of Auguſt.

Government and Virtues. It is an herb of Mars. The root of maſter-wort is hotter than pepper, and very available in all cold griefs and diſeaſes both of the ſtomach and body, diſſolving very powerfully both upwards and downwards. It is alſo uſed in a decoction, with wine, againſt all cold rheums, or diſtillations upon the lungs, and ſhortneſs of breath, if taken mornings and evenings. It alſo provoketh urine; helps to break the ſtone, and expel the gravel from the kidneys; procureth women's courſes, and expelleth the dead birth: is ſingular good for ſtrangling of the mother, and other ſimilar feminine diſeaſes. It is effectual againſt the dropſy, cramps, and the falling ſickneſs. The decoction, in wine, being gargled in the mouth, extracteth much water and phlegm from the brain, purging and eaſing it of what oppreſſeth it. It is an excellent remedy againſt all ſorts of cold poiſon; it provoketh ſweat; but, leſt the taſte hereof or of the ſeed (which worketh to the like effect, though not ſo powerfully) ſhould be too offenſive, the beſt way is to take the water diſtilled from both the root and herb. The juice thereof, or tents dipped therein, applied either to green wounds or filthy rotten ulcers, and ſuch as are given by envenomed weapons, doth very ſoon cleanſe and heal them. It is alſo a very good preventative againſt the rheumatiſm and gout, when they originate from cold.

## SWEET MAUDLIN.

Description. COMMON maudlin has ſomewhat long and narrow leaves, ſnipped about the edges; the ſtalks are two feet high, bearing at the tops many yellow flowers, ſet round together, and all of an equal height, in umbels, with tufts like tanſy; after which flowereth ſmall whitiſh ſeed, almoſt as big as wormſeed. This herb is both ſweet and bitter.

Place and Time. It groweth in gardens, and flowereth in June and July.

Government and Virtues. The virtues of this herb are ſimilar to that of coſtmary, or alecoſt; it is therefore unneceſſary to repeat them.

## THE MEDLAR.

Description. THIS tree groweth near the bigneſs of the quince-tree, with tolerably large ſpreading branches; longer and narrower leafed than either the apple or quince, and not dented about the edges. At the end of the ſprigs ſtand the flowers, formed of five white, great, broad-pointed, leaves, marked in the middle with ſome white threads; after which cometh the fruit, of a browniſh green colour, when ripe, bearing the reſemblance of a crown on the top, which was originally the five green leaves; and, being rubbed off, or having fallen away, the head of the fruit appears ſomewhat hollow. The fruit is very harſh before it is mellow, and uſually hath five hard kernels within it.

There is another kind hereof, differing in nothing from the former, but that it hath ſome thorns on it, in ſeveral places, which the other hath not; and the fruit is ſmall, and not ſo pleaſant.

Time and Place. They grow in this kingdom, and flower in May generally; they bear ripe fruit in September and October.

Government and Virtues. The tree is under Saturn. A better medicine for ſtrengthening the retentive faculties is hardly to be met with; it ſtays the longing of women. A plaiſter made of the fruit, before they are rotten, with other neceſſary ingredients, applied to the reins of the back, ſtops the miſcarriage of women with child. They are very powerful in ſtaying any fluxes of the blood, or humours, in men or women. The leaves have alſo the ſame quality. The fruit, when eaten by women with child, ſtayeth their longings after unuſual meat, and is very effectual for thoſe who are apt to miſcarry. The decoction of them is good to gargle and waſh the mouth, throat, and teeth; when there is any defluxion of blood, to ſtay it, or of humours which cauſe pains and ſwellings. It is a good bath for women to ſit over that have their courſes flow too abundantly; or for the piles, when they bleed too much. A poultice or plaiſter, made of dried medlars, beaten and mixed with the juice of red roſes, a few cloves, ſome nutmeg, and a little red coral, and applied to the ſtomach, effectually preventeth the caſting or loathing of meat. The dried leaves in powder, ſtrewed on freſh bleeding wounds, reſtrain the blood and cloſe the wound quickly. The medlar ſtones, made into powder, and drunk in wine wherein ſome parſley-roots have been infuſed, or a little boiled, help to break and expel the ſtone in the kidneys, and is a perfect cure for the gravel in the moſt obſtinate caſes.

## MELILOT, OR KING'S-CHAFER.

Description. THIS hath many green ſtalks, two or three feet high, riſing from a tough, long, white, root, which dieth not every year; ſet round about at the joints with ſmall, and ſomewhat long, ſweet-ſmelling leaves, three together, unevenly dented about the edges. The flowers are yellow, alſo of a ſweet ſcent, and formed like other trefoil, but ſmall, ſtanding in ſmall ſpikes, one above another, for an hand's-breadth long, or more, which afterwards turn into long crooked pods, wherein is contained flat ſeed, ſomewhat brown.

Place. It groweth plentifully in many parts of this kingdom; on the borders of Suffolk; in Eſſex, Huntingdonſhire, and many other places; but moſt uſually in corn-fields and corners of meadows.

Time. It flowereth in June and July, and is ripe quickly after.

Government and Virtues. Melilot, boiled in wine, and applied to the parts, mollifies all hard tumours and inflammations that happen in the eye, or other parts of the body; and it is not unuſual, in ſuch caſes, to add the yolk of a roaſted egg, fine flour, poppy-ſeed, or endive. It healeth ſpreading ulcers in the head, being waſhed with lye made thereof; being applied freſh, or boiled with any of the aforenamed articles, it relieves pains in the ſtomach; it alſo helpeth pains in the ears, being dropped into them; and, ſteeped in vinegar and roſe-water, it mitigateth the head-ach. The flowers of melilot and camomile are frequently mixed in clyſters to expel wind and to eaſe pains; alſo into poultices, for the ſame purpoſe; and to aſſuage ſwellings or tumours in the ſpleen, or other parts; and helpeth inflammations in any part of the body. The juice, dropped into the eyes, is a ſingular good medicine to take away any film or ſkin that cloudeth or dimmeth the eye-ſight. The head often waſhed with the diſtilled water of the herb and flowers, or a lye made therewith, is effectual for thoſe that have ſuddenly loſt their ſenſes; as alſo to ſtrengthen the memory, comfort the head and brain, and to preſerve them from pains and the apoplexy.

## FRENCH AND DOG'S MERCURY.

Description. THIS riſeth up with a ſquare green ſtalk, full of joints, two feet high or thereabouts, with two leaves at every joint, and branches likewiſe from both ſides of the ſtalk, ſet with freſh green leaves, ſomewhat broad and long, about the bigneſs of the leaves of baſil, finely dented about the edges. Towards the tops of the ſtalks and branches, come forth, at every joint, in the male mercury, two ſmall, round, green, heads, ſtanding together upon a ſhort footſtalk, which, when ripe, are the ſeed, not bearing any flower. In the female, the ſtalk is longer, ſpike-faſhioned, ſet round about with ſmall green huſks, which are the flowers, made like ſmall branches of grapes, which give no ſeed, but remain long upon the ſtalk without ſhedding. The root is compoſed of many ſmall fibres, and periſheth every year on the approach of winter; it riſeth again of its own ſowing, and, where it is once ſuffered to ſow itſelf, the ground will never be without it afterwards, even of both ſorts, male and female.

French mercury helps conception. Coſtæus, in his book of the nature of plants, ſays, that the juice of mercury, holyhock, and purſlain, mixed together, and the hands bathed therein, defendeth them from burning, if they are thruſt into boiling lead. This is what ſhew-men and merry-andrews bathe their mouths with, when they pretend to eat fire.

## DOG's MERCURY.

HAVING deſcribed that which is called French mercury, we come now to that which is known by the deſignation of dog's mercury.

Description. This is likewiſe of two kinds, male and female, having many ſtalks, ſlenderer and lower than mercury, and without any branches at all upon them. The root is ſet with two leaves at every joint, ſomewhat greater than the female, but more pointed and full of veins; ſomewhat harder in handling; of a darker green colour, and leſs dented or ſnipped about the edges. At the joints, with the leaves, come forth longer ſtalks than the former, with two hairy round ſeeds upon them, twice as big as thoſe of the former mercury. The taſte thereof is herby, and the ſmell ſomewhat ſtrong and virulent. The female hath much harder leaves, ſtanding upon longer foot-ſtalks, and the ſtalks are alſo longer. From the joints come forth ſpikes of flowers ſimilar to thoſe of the French female mercury. The roots of both are numerous, and full of ſmall fibres, which run under ground, and mat themſelves very much; not periſhing as the former mercury does, but remaining the whole winter, and ſhooteth forth new branches every year, the old ones falling to the ground.

Place. The male and female French mercury are found wild in divers parts of the kingdom: particularly at a village called Brookland, in Romney-marſh, in the county of Kent.

The dog's mercury is to be found in various parts of Kent, and elſewhere; but the female is more ſeldom to be met with than the male.

Time. They flouriſh in the ſummer months, and then produce their ſeed.

Government and Virtues. Mercury, it is ſaid, owns this herb, but we are of opinion that it is under the dominion of Venus. The decoction of the leaves of mercury, or the juice thereof, in broth, or drunk with a little ſugar put to it, purgeth choleric and watery humours. Hippocrates commendeth it wonderfully for women's diſeaſes; when applied to the ſecret parts, it eaſeth the pains of the mother; and, when uſed as a decoction, helps women's courſes, and expels the after-birth; the decoction, mixed with myrrh or pepper, or applying the leaves externally, is effectual againſt the ſtranguary and diſeaſes of the reins and bladder. It is alſo uſeful for ſore and watery eyes, and for deafneſs and pains in the ears, by dropping the juice into them, and bathing them afterwards in white wine. The decoction thereof made with water and a cock chicken, is a ſafe medicine againſt hot fits of the ague. It alſo cleanſeth the lungs and ſtomach of phlegm, though rather offenſive to the ſtomach. The juice, or diſtilled water, ſnuffed up into the noſtrils, purgeth the head and eyes of catarrhs and rheums. Two or three ounces of the diſtilled water, with a little ſugar, are ſometimes taken, in the morning, faſting, to open and purge the body of groſs, viſcous, and melancholy, humours. What Dioſcorides and Theophraſtus relate of this herb is truly wonderful, if not fabulous, viz. that, if women uſe them, either inwardly or outwardly, for three days together, after conception, and their menſes be ſtopped, they ſhall bring forth male or female children according to the kind of herb which they uſe. Mathiolus ſaith, that the ſeed, both of the male and female-mercury, boiled with wormwood, and drunk, cureth the yellow jaundice in a ſpeedy manner. The leaves, or the juice, rubbed upon warts, taketh them away. The juice, mixed with ſome vinegar, helpeth all running ſcabs, tetters, ring-worms, and the itch. Galen ſaith, that, being applied in the manner of a poultice to any ſwelling or inflammation, it digeſteth the ſwelling, and allayeth the inflammation; and is therefore given in clyſters to evacuate offenſive humours from the belly. Dog's mercury, though leſs uſed, is notwithſtanding ſerviceable in purging off watery and melancholy humours.

## MINT.

Description. OF all the kind of mints, the ſpear-mint, or hart-mint, is the moſt uſeful; the deſcription thereof will therefore be ſufficient. Spear-mint hath divers round long ſtalks, with narrow leaves ſet thereon of a dark green colour. The flowers ſtand in ſpiked heads at the tops of the branches, being of a pale bluiſh colour. The ſmell or ſcent thereof is ſomewhat ſimilar to baſil: it increaſeth by the root, under ground, as all the others do.

Place. It is an uſual inhabitant of gardens; and, though it ſeldom giveth any good ſeed, yet this defect is recompenſed by the plentiful increaſe of the root, which being once planted in a garden is hardly to be eradicated. It flowers in Auguſt.

Government and Virtues. It is an herb of Venus. Dioſcorides ſaith it hath a heating, drying, and binding, quality; therefore the juice, taken with vinegar, ſtayeth bleeding; it is an incentive to venery and bodily luſt. Two or three branches thereof, taken with the juice of four pomegranates, ſtay the hiccough, vomiting, and allay choler. It diſſolveth impoſthumes, being applied with barley-meal. It is good to repreſs the milk in women's breaſts; and for ſuch as have ſwoln, flagging, or large, breaſts. Applied with ſalt, it helpeth the bite of a mad dog; with mead or honeyed water, it eaſeth the pains of the ears, and taketh away the roughneſs of the tongue, being rubbed thereupon. If the leaves are boiled or ſteeped in milk before drinking, it hindereth the curdling thereof on the ſtomach. In ſhort, it is a very powerful ſtomachic. The frequent uſe hereof is very efficacious in ſtopping women's courſes and the whites. Applied to the forehead or temples, it eaſeth pains of the head; it is good to waſh the heads of young children, being a preventative againſt all manner of breakings-out, ſores, or ſcabs, thereon; it alſo healeth chops in the fundament, and is exceedingly uſeful againſt the poiſon of venomous creatures. The diſtilled water from mint is available for all the purpoſes aforeſaid, yet more weakly; but the ſpirit thereof, when properly and chemically drawn, is much more powerful than the herb itſelf. Simon Sethi ſaith, it helpeth a cold liver; ſtrengtheneth the belly and ſtomach; cauſeth digeſtion; ſtayeth vomiting and the hiccough; is good againſt the gnawing of the heart; provoketh appetite; taketh away obſtructions of the liver, and ſtirreth up bodily luſt; but it muſt not be taken in too great quantities, as it tends to make the blood thin and wheyiſh, and turneth it into choler; therefore choleric people muſt abſtain from it. It is a ſafe medicine for the bite of a mad * dog, being bruiſed with ſalt, and applied to the wound. The powder of it, being dried, and taken after victuals, helpeth digeſtion, and thoſe that are ſplenetic. Taken in wine, it helpeth women in ſore travail in child-bearing. It is good againſt the gravel and ſtone in the kidneys, and the ſtranguary. Being ſmelled unto, it is comfortable for the head and memory. The decoction thereof, when uſed as a gargle, cureth the mouth and gums when ſore, and helpeth a ſtinking breath; when mixed with rue and coriander, alſo uſed

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* For the bite of a mad dog, the author's *Solar Tincture* combines all the virtues of this and other ſuch herbs, and is an infallible remedy, whether the bite is received by man or beaſt. Let the part bitten be waſhed clean out, after which, pour the Tincture in and round the affected part, and wherever the hydrophobia is ſuppoſed to have fallen. Bind on ſome lint dipped three or four times, and let a few drops be taken frequently in a wine-glaſs of water.

as a gargle, it cauſeth the palate of the mouth to return to its place, when down. Mint, ſaith Pliny, exhilarates the mind, and is therefore proper for the ſtudious. When put into any veſſel containing milk, it hindereth the curdling thereof, and no butter can be got therefrom.

The virtues of the wild or horſe mint, which grows in ditches, and by the ſides of rivers (the deſcription of which is unneceſſary, being ſo well known), are eſpecially to diſſolve wind in the ſtomach, to help the cholic, and thoſe that are ſhort-winded, and are an effectual remedy againſt venereal dreams and pollutions in the night, being outwardly applied to the teſticles. The juice dropped into the ears eaſeth the pains thereof and deſtroyeth the worms that breed therein. They are good againſt the venomous biting of ſerpents. The juice, laid on warm, helpeth the king's-evil, or kernels in the throat. The decoction, or diſtilled water, helpeth a ſtinking breath proceeding from the corruption of the teeth; and, ſnuffed up into the noſe, purgeth the head. Pliny ſaith, that eating of the leaves, and applying ſome of them to the face, have been found, by experience, to cure the leproſy, and, when uſed with vinegar, to help the ſcurf or dandriff of the head.

They are extremely bad for wounded people; it being aſſerted, that whoever eats mint, when wounded, will never be cured.

## MISLETOE.

Description. THIS riſeth up from the branch or arm of the tree whereon it groweth, with a woody ſtem, parting itſelf into ſundry branches, and they are again divided into many other ſmaller twigs, interlacing themſelves one within another, very much covered with a greyiſh green bark, having two leaves ſet at every joint, and at the end likewiſe, which are ſomewhat long and narrow, ſmall at the bottom, but broader towards the end. At the knots or joints of the boughs and branches grow ſmall yellowiſh flowers, which turn into ſmall, round, white, tranſparent, berries, three or four together, full of glutinous moiſture, with a blackiſh ſeed in each of them, which was never yet known to produce any thing, though planted in gardens, and other places, for the purpoſe of trying it.

Place. It groweth very rarely on oak-trees in this kingdom, but upon ſundry others, as well timber as fruit trees; and is to be met with in woods, groves, &c.

Time. It flowereth in the ſpring time, but the berries are not ripe until October, and, remaining on the branches, ſerve the birds for food in ſevere weather.

Government and Virtues. That it is under the dominion of the Sun is without a doubt; that which grows upon the oak participates ſomething of the nature of Jupiter, becauſe an oak is one of his trees; as alſo that which grows upon pear-trees and apple-trees participates ſomething of that nature, becauſe he rules the trees it grows upon, having no root of its own; but why that ſhould have more virtue that grows upon the oak is not ſo eaſily determinable, unleſs becauſe it is rareſt and hardeſt to be come at. Cluſius aſſerts, that which grows upon pear-trees is equally efficacious with the other ſorts, provided it doth not touch the ground after it is gathered; and alſo ſaith, that, being hung about the neck, it remedies witchcraft. Both the leaves and berries of miſletoe are of a hot and dry nature, and of ſubtle parts. Bird-lime, made thereof, doth mollify hard knots, tumours, and impoſthumes; ripening and diſcuſſing them; draweth forth thick as well as thin humours from the remote parts of the body, digeſting and ſeparating them; and, being mixed with equal parts of roſin and wax, mollifies the hardneſs of the ſpleen, and healeth old ulcers and ſores; being mixed with ſandarac and orpiment, with quick-lime and wine-lees added thereto, it draws off foul nails from the fleſh. Mathiolus ſaith, that the miſletoe of the oak (being the beſt), made into powder, and given in drink to thoſe that have the falling ſickneſs, doth aſſuredly heal them; provided it be taken forty days together. Some hold it ſo highly in eſtimation, that it is termed *lignum ſanctæ crucis*, or wood of the holy croſs, believing it to help the falling ſickneſs, apoplexy, and palſy, very ſpeedily, not only when taken inwardly, but applied externally, by hanging it about the neck. Tragus ſaith, that by bruiſing the green wood of any miſletoe, and dropping the juice ſo drawn therefrom into the ears of thoſe who are troubled with impoſthumes, it healeth the ſame in a few days.

The powder of it alſo cures a pleuriſy, and forces the courſes. Some think the miſletoe that grows on the haſel-tree is better for the falling ſickneſs, and other diſeaſes of the head, than that which grows on the oak. Henricus ab Steers thinks it does not grow on haſel-trees till they are about an hundred years old. A young lady, having been long troubled with the falling ſickneſs, for which ſhe had taken every thing preſcribed for her by the moſt famous doctors, without effect, but growing rather worſe, having eight or ten dreadful fits in a day, was cured only by the powder of true miſletoe, given as much as would lie on a ſixpence, early in the morning, in black-cherry-water, or in beer, for ſome days near the full-moon.

## MONEY-WORT, OR HERB-TWOPENCE.

DESCRIPTION. THE common money-wort ſendeth forth, from a ſmall thready root, divers long, weak, and ſlender, branches, lying and running upon the ground, two or three feet long or more, ſet with leaves two at a joint, one againſt another at equal diſtances, which are almoſt round, but jointed at the ends, ſmooth, and of a good green colour. At the joints, with the leaves from the middle forward, come forth at every joint ſometimes one yellow flower, and ſometimes two, ſtanding each on a ſmall foot-ſtalk, formed of five leaves, narrow and pointed at the ends, with ſome yellow threads in the middle; which being paſt, there come in their places ſmall round heads of ſeed.

Place. It groweth plentifully in almoſt every part of the kingdom, commonly in moiſt grounds, by the ſides of hedges, and in the middle of graſſy fields.

Time. They flower in June and July, and their ſeed is ripe quickly after.

Government and Virtues. Venus owns it. Money-wort is ſingular good to ſtay all fluxes in man or woman, whether they be laſks, bloody fluxes, the flowing of women's courſes, bleedings inwardly or outwardly, and the weakneſs of the ſtomach that is given to caſting. It is alſo very good for all ulcers or excoriations of the lungs, or other inward parts. It is exceeding good for all wounds, whether freſh and green, or old ulcers of a ſpreading nature, and healeth them ſpeedily; for all which purpoſes, the juice of the herb; the powder drunk in water wherein hot ſteel hath been often quenched; the decoction of the green herb in wine or water drunk; the ſeed, juice, or decoction uſed to waſh or bathe the outward places, or to have tents dipped therein and applied to the wounds; are effectual.

## MOON-WORT.

Description. IT riſeth up, uſually, but with one dark-green, thick and flat, leaf, ſtanding upon a ſhort foot-ſtalk, not above two fingers breadth; but, when it flowers, bears a ſmall ſlender ſtalk, about four or five inches high, having but one leaf ſet in the middle thereof, which is much divided on both ſides, into ſometimes five or ſeven parts on a ſide, and ſometimes more, each of which parts is ſmall next the middle rib, but broad forwards, and round-pointed, reſembling a half-moon, from whence it takes its name, the uppermoſt parts or diviſions being leſs than the loweſt. The ſtalk riſeth above this leaf two or three inches, bearing many branches of ſmall long tongues, every one like the ſpiky head of adders-tongue, of a browniſh colour, which, whether they may be called the flowers or ſeed, is not ſo well certified; but, after continuing a while, reſolve into a mealy duſt. The root is ſmall and fibrous. This hath ſometimes divers ſuch-like leaves as are before deſcribed, with ſo many branches or tops riſing from one ſtalk, each divided from the other.

Place. It groweth on hills and heaths, particularly where there is plenty of graſs.

Time. It is to be found only in April and May; but in June, if hot weather cometh, it generally withers and dies.

Government and Virtues. The moon owns this herb. Moon-wort is cold and drying, in a greater degree even than adders-tongue, and is therefore ſerviceable in all wounds, both inward and outward. The leaves boiled in red wine, and drunk, ſtay the immoderate flux of women's courſes, and the whites. It alſo ſtayeth bleeding, vomiting, and other fluxes; helpeth all blows and bruiſes, and conſolidates fractures and diſlocations. It is good for ruptures; but is chiefly uſed by moſt, with other herbs, to make oils, or other balſams, to heal freſh or green wounds, either inward or outward, for which it is exceeding good, as is before obſerved.

Alchemiſts ſay, that this herb is peculiarly uſeful to them in making ſilver.--- It is reported, that whatever horſe caſually treads upon this herb will loſe his ſhoes; it is alſo ſaid to have the virtue of unlocking their fetlocks and cauſing them to fall off; but, whether theſe reports be fabulous or true, it is well-known to the country people by the name of unſhoe-horſe. Galen ſaith, that, if it be given to ſuch as are enraged by the biting of a mad dog, it doth perfectly cure them.

## MOSS.

IT would be needleſs to trouble the reader with a deſcription of every kind of moſs; that of the ground-moſs and tree-moſs, which are both well-known, being ſufficient for our purpoſe.

Place. The ground-moſs grows in moiſt woods, at the bottom of hills, in boggy-grounds, ſhadowy ditches, and other ſuch-like places, in all parts of the kingdom.

The other groweth only upon trees.

Government and Virtues. All ſorts of moſs are under the dominion of Saturn. The ground-moſs, being boiled in wine, and drunk, is held to be very efficacious in breaking the ſtone, and to expel and drive it forth by urine. The herb, bruiſed and boiled in water, and applied, eaſeth all inflammations and pains proceeding from hot cauſes; and is therefore uſed to relieve pain ariſing from the gout.

The different kinds of tree-moſs are cooling and binding, and partake of a digeſting and mollifying quality withal, as Galen ſaith. But each moſs doth partake of the nature of the tree from whence it is taken; therefore that of the oak is more binding, and is of good effect to ſtay fluxes in men or women; as alſo vomitings or bleedings, the powder thereof being taken in wine. The decoction thereof in wine is very good for women to be bathed with, or to ſit over, that are troubled with the overflowings of their courſes. The ſame, being drunk, ſtayeth the ſtomach that is troubled with caſting, or the hiccough; and, Avicenna ſaith, it comforteth the heart. The powder thereof, taken in drink for ſome time together, is thought available for the dropſy. The oil of roſes, which has had ſome freſh moſs ſteeped therein for a time, and afterwards boiled and applied to the temples and forehead, doth wonderfully eaſe the head-ach ariſing from a hot cauſe; as alſo the diſtillation of hot rheum or humours from the eyes, or other parts. The ancients uſed it much in their ointments and other medicines, againſt laſſitude, and to ſtrengthen and comfort the ſinews; it may, conſequently, be applied by the moderns with equal ſucceſs.

## MOTHER-WORT.

Description. THIS hath a hard, ſquare, browniſh, rough, ſtrong, ſtalk, riſing three or four feet high at leaſt, ſpreading into many branches, whereon grow leaves on each ſide, with long foot-ſtalks, two at every joint, which are ſomewhat broad and long, as it were rough or crumpled, with many great veins thereon, of a ſad-green colour, deeply dented about the edges, and almoſt divided. From the middle of the branches, up to the tops of them (which are very long and ſmall), grow the flowers round about them, at diſtances, in ſharp-pointed, rough, hard, huſks, of a more red or purple colour than balm or hoarhound, but in the ſame manner or form as horehound; after which come ſmall, round, blackiſh, ſeeds, in great plenty. The root ſendeth forth a number of long ſtrings and ſmall fibres, taking ſtrong hold in the ground, of a dark yellowiſh or browniſh colour, and remaineth as the horehound doth; the ſmell of this being not much different from it.

Place. It is only produced in gardens in this kingdom.

Government and Virtues. Venus owns this herb, and it is under Leo. There is no better herb to drive melancholy vapours from the heart, to ſtrengthen it, and make the mind cheerful, blithe, and merry. It may be kept in a ſyrup or conſerve; therefore the Latins call it *cordiaca*. The powder thereof, to the quantity of a ſpoonful, drunk in cold wine, is a wonderful help to women in ſore travail, as alſo for ſuffocations or riſings of the mother; and from theſe effects it moſt likely got the name of mother-wort. It alſo provoketh urine, and women's courſes; cleanſeth the cheſt of cold phlegm oppreſſing it, and killeth worms in the belly. It is of good uſe to warm and dry up the cold humours, to digeſt and diſperſe them that are ſettled in the veins, joints, and ſinews, of the body, and to help cramps and convulſions.

## MOUSE-EAR.

Description. MOUSE-EAR is a low herb, creeping upon the ground by ſmall ſtrings like the ſtrawberry plant, from which it ſhooteth forth ſmall roots, whereat grow, upon the ground, many ſmall and ſomewhat ſhort leaves, ſet in a round form together, hollowiſh in the middle, where they are broadeſt; of an hoary colour all over, and very hairy, which, being broken, produce white milk. From among theſe leaves ſpring up two or three ſmall hoary ſtalks, about a ſpan high, with a few ſmaller leaves thereon; at the tops whereof ſtandeth uſually but one flower, conſiſting of many paler yellow leaves, broad at the points, and a little dented in, ſet in three or four rows, the largeſt outermoſt, very like a dandelion flower, and a little reddiſh underneath about the edges, eſpecially if it grow in dry ground; which, after they have ſtood long in flower, turn into down, which, with the ſeed, is blown away by the wind.

Place. It groweth on the banks of ditches, and in ſandy ground.

Time. It flowereth in June and July, and remaineth green all the winter.

Government and Virtues. The moon owns this herb alſo. The juice thereof, taken in wine, or the decoction thereof drunk, doth help the jaundice, although of long continuance; it is a ſpecial remedy againſt the ſtone, and griping pains of the bowels. The decoction, thereof, with ſuccory and centaury, is held very effectual to help the dropſy, and them that are inclining thereunto, as well as diſeaſes of the ſpleen. It ſtayeth the fluxes of blood, whether at the mouth or noſe, and inward bleedings alſo; it is very efficacious for wounds both inward and outward; it helpeth the bloody flux and the abundance of women's courſes.* There is a ſyrup made of the juice thereof, and ſugar, by the apothecaries of Italy and other places, which is accounted very ſerviceable to thoſe that are troubled with the cough and phthiſic. The ſame is alſo ſingularly good for ruptures or burſtings. The green herb, bruiſed, and directly applied to any freſh cut or wound, doth quickly heal it; and the juice, decoction, or powder of the dried herb, is very good to ſtay the malignity of ſpreading and fretting cankers and ulcers. The diſtilled water of the plant is available in all the diſeaſes aforeſaid, and to waſh outward wounds and ſores, and by applying tents or cloths wet therein.

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* To ſtay the abundance of women's courſes, and to keep them in due proportion and regular, no medicine in the whole *Materia Medica* was ever found ſo efficacious as the author's Lunar Tincture; the inherent virtues of which contain the ſalubrious qualities of this and all other lunar herbs congenial to the female ſex.

## MUGWORT.

Description. COMMON mugwort hath divers leaves lying upon the ground, very much divided, or cut deeply in about the brims, ſomewhat like wormwood, but much larger; of a dark green colour on the upper ſide, and very hoary, white, underneath. The ſtalks riſe to the height of four or five feet, having on it ſimilar leaves to thoſe below, but ſomewhat ſmaller, branching forth very much towards the top, whereon are ſet very ſmall pale yellowiſh flowers like buttons, which fall away; and after them come ſmall ſeed incloſed in round heads. The root is long and hard, with many ſmall fibres growing from it, whereby it taketh ſtrong hold in the ground; but both ſtalk and leaf die every year, and the root ſhooteth forth anew in the ſpring. The whole plant is of a tolerably good ſcent, and is more readily propagated by the ſlips than by the ſeed.

Place. It groweth plentifully in many parts of this kingdom, by the road-ſide; alſo, by ſmall water-courſes; and in divers other places.

Time. It flowereth and ſeedeth in the end of ſummer.

Government and Virtues. This is an herb of Venus; therefore maintaineth the parts of the body ſhe rules, and remedies the diſeaſes of the parts that are under her ſigns, Taurus and Libra. Mugwort is uſed with good ſucceſs, among other herbs, in a hot decoction, for women to ſit over, to provoke the courſes, help delivery, and expel the after-birth; alſo, for the obſtructions and inflammations of the mother. It breaketh the ſtone, and cauſeth one to make water when it is ſtopped. The juice thereof, made up with myrrh, and formed into a peſſary, worketh the ſame effects; the root, being made into an ointment, with hogs-lard, taketh away wens and hard knots and kernels that grow about the neck and throat, and eaſeth pains about the neck more effectually, if ſome field daiſies be put with it. The herb itſelf, being freſh, or juice thereof, taken, is a ſpecial remedy for an over-doſe of opium. Three drams of the powder of the dried leaves, taken in wine, is a ſpeedy, and the moſt certain, cure for the ſciatica. A decoction thereof, made with camomel and agrimony, taketh away pains of the ſinews and the cramp, if the place is bathed therewith while warm.

The leaves and flowers, and the tops of the young ſhoots, in this plant, are all full of virtue; they are aromatic to the taſte, with a little ſharpneſs; and are a moſt ſafe and excellent medicine in female diſorders ariſing from obſtruction.

The herb has been famous for this from the earlieſt time; and Providence has placed it every where about our doors; ſo that reaſon and authority, as well as the notice of our ſenſes, point it out for uſe; but chemiſtry has baniſhed natural medicines. Dioſcorides beſtows high praiſes on the herb; and directs the flowery tops to be uſed, juſt before they open into bloom; he determines the doſe to be three drams; and the manner of taking it as tea. It is happy that the ancients, who ſaw the great effect of theſe medicines, have been ſo accurate in the doſe and manner of giving them; wherever they have, we find them always right, and may depend on them as our beſt guides; where they have not been ſo particular, no gueſs, or bold opinion, is to be indulged; but all is to be learned from careful trial. To be aſſured of their medicines, is the firſt care: and, that being aſcertained, we ſhall be certain to find the accounts they give us of their virtues true, if we will wait with patience till we find the doſe, beginning from a little. The many who apply, wearied with the expence, and tired with the vain hope of relief from the common practice, give abundant opportunities of finding this ſafely and exactly; and, if this publication conveys clearly to mankind the way to reap the advantages of ancient Galenical medicines, the attention to the object will have been well beſtowed.

There is no better medicine for young women, in whom the efforts of nature are too weak, than this: the flowers and buds ſhould be ſtripped off from the tops of ſtalks; three drams of theſe, clipped ſmall, ſhould be put into a baſon, and half a pint of boiling water poured upon them; and when juſt cool it is to be drunk with a little ſugar and cream: this is to be taken twice a-day during the time of nature's effort, and ſhe will rarely want any farther help; but, if its effect be not altogether ſufficient, ſuch a tea of it ſhould be drunk afterwards every day. Nothing is ſo deſtructive to the conſtitution as the uſe of too powerful medicines on this occaſion; this is ſufficient, and can do no harm. But it is not to this time of life it is limited, it may be taken at any period; and there is a peculiar way of uſing it to great advantage. A lady of thirty-eight, unmarried, and healthy, after riding many mornings on horſeback, (a new exerciſe to her, and therefore over-pleaſing,) found herſelf diſappointed at the period of her expectation; with feveriſh heat, pain, ſwelling, and, I believe, inflammation. She had been blooded in the foot; had taken penny-royal water; and was entering upon ſomething of more power, when, being informed by another lady of the virtues of this herb, and that the excellent Dioſcorides, a better phyſician than Friend or Mead, adviſed the ſitting over the ſteam of a decoction of it on certain occaſions; and that, in this particular caſe, that way ſeemed in every ſenſe moſt proper. A pound of mugwort was boiled in two gallons of water; the whole was put together into a pan; and, when the vapour was not too hot to be borne, the lady ſat over it. It was done at night; and, before morning, all was well and happy.

THE

## THE MULBERRY TREE.

THIS is ſo well known, where it groweth, that it needeth no deſcription.

TIME. It beareth fruit in the months of July and Auguſt.

GOVERNMENT AND VIRTUES. Mercury rules the tree, therefore are its effects variable as his are. The mulberry partakes of different and oppoſite qualities; the ripe berries, by reaſon of their ſweetneſs and ſlippery moiſture, opening the body, and the unripe binding it, eſpecially when they are dried; and then they are good to ſtay fluxes, laſks, and the abundance of women's courſes. The bark of the root killeth the broad worms in the body. The juice, or the ſyrup made of the juice, of the berries, helpeth all inflammations or ſores in the mouth or throat, and the pallet of the mouth when it is fallen down. The juice of the leaves is a remedy againſt the biting of ſerpents, and for thoſe that have taken aconite; the leaves, beaten with vinegar, are good to lay on any place that is burnt with fire. A decoction made of the bark and leaves, is good to waſh the mouth and teeth when they ach. If the root be a little ſlit or cut, and a ſmall hole made in the ground next thereunto, in the harveſt time, it will give out a certain juice, which being hardened the next day, is of good uſe to help the tooth-ach, to diſſolve knots, and purge the belly. The leaves of mulberries are ſaid to ſtay bleeding at the mouth or noſe, the bleeding piles, or of any wound, being bound unto the places. A branch of the tree, taken when the moon is at the full, and bound to the wriſt of a woman whoſe courſes overflow, ſtays them in a ſhort ſpace.

## MULLEIN.

DESCRIPTION. COMMON white mullein hath many fair, large, woolly, white, leaves, lying next the ground, ſomewhat longer than broad, pointed at the ends, and dented as it were about the edges; the ſtalk riſeth up to be four or five feet high, covered over with ſuch-like leaves, but ſmaller, ſo that no ſtalks can be ſeen for the quantity of leaves thereon, up to the flowers, which come forth on all ſides of the ſtalk, generally without any branches, and are many ſet together in a long ſpike, in ſome of a gold yellow colour, in others more pale, conſiſting of five round pointed leaves, which afterwards have little round heads, wherein a ſmall browniſh ſeed is contained. The root is long, white, and woody; periſhing after it hath borne ſeed.

PLACE. It groweth by road-ſides and lanes in many parts of the kingdom.

TIME. It flowereth in July, or thereabouts.

Government and Virtues. It is under the dominion of Saturn. A ſmall quantity of the root, given in wine, is commended by Dioſcorides againſt laſks and fluxes. The decoction thereof, being drunk, helpeth ruptures, cramps, and convulſions, and thoſe that are troubled with an old cough; and, when uſed as a gargle, eaſeth the tooth-ach. An oil, made by frequently infuſing the flowers, has a very good effect on the piles. The decoction of the root, in red wine, or in water (if attended with an ague) wherein red-hot ſteel hath been often quenched, ſtayeth the bloody flux; and alſo openeth obſtructions of the bladder and reins, when there is a ſtoppage of urine. A decoction of the leaves thereof, and of ſage, marjoram, and camomile flowers, and the ſinews being bathed therewith that are benumbed with cold, or cramps, doth much eaſe and comfort them. Three ounces of the diſtilled water of the flowers, drunk morning and evening, for ſome days together, are ſaid to be an excellent remedy for the gout. The juice of the leaves and flowers being laid upon rough warts, as alſo the powder of the dried roots, when rubbed on, doth take them away; but have no effect upon ſmooth warts. The powder of the dried flowers is an eſpecial remedy for thoſe that are troubled with the cholic or belly-ach. The decoction of the root, and likewiſe of the leaves, is of great effect in diſſolving tumours, ſwellings, or inflammations of the throat. The ſeed and leaves boiled in wine, and applied to the place, ſpeedily draweth forth thorns and ſplinters from the fleſh, eaſing the pain and healing the wound at the ſame time. The leaves, bruiſed and wrapped in double papers, and covered with hot aſhes and embers, in which they muſt be baked for ſome time, and then taken and laid on any blotch or boil, diſſolve and heal them.

## MUSTARD.

Description. OUR common muſtard hath large and broad rough leaves, very much jagged with uneven and diſorderly gaſhes, ſomewhat like turnip leaves, but ſmaller and rougher; the ſtalk riſeth to be upwards of a foot high, and ſometimes two feet high; being round, rough, and branched at the top, bearing ſimilar leaves thereon to thoſe below, but ſmaller and leſs divided, and divers yellow flowers one above another at the tops, after which come ſmall rough pods, with ſmall lank flat ends, wherein is contained round yellowiſh ſeed, ſharp, hot, and biting to the tongue. The roots are ſmall, long, and woody, when it beareth ſtalk, and periſheth every year.

Place. This groweth in gardens only, and other manured grounds.

Time. It is an annual plant, flowering in July, and the ſeed is ripe in Auguſt.

Government and Virtues. It is an excellent ſauce for thoſe whoſe blood wants clarifying, and for weak ſtomachs, being an herb of Mars; it is hurtful to choleric people, but highly ſerviceable to thoſe who are aged, or troubled with cold diſeaſes. Aries claims ſome ſhare of dominion over this plant; it therefore ſtrengthens the heart, and reſiſteth poiſon; let ſuch whoſe ſtomachs are ſo weak that they cannot digeſt their victuals, or have no appetite thereto, take of muſtard-ſeed a dram, cinnamon as much, and, after beating them to powder, add half as much powder of maſtic, and, with gum arabic diſſolved in roſe water, make it up into troches, of which the quantity of half a dram may be taken an hour or two before meals, and the good effects thereof will ſoon be apparent, more particularly to the aged of either ſex. Muſtard-ſeed hath the virtue of heating, diſcuſſing, rareſying, drawing out ſplinters of bones, and other things, out of the fleſh; provokes the menſes; is good for the falling ſickneſs, lethargy, drowſineſs, and forgetfulneſs, by uſing it both inwardly and outwardly, rubbing the noſtrils, forehead, and temples, to warm and quicken the ſpirits, as, from its fierce ſharpneſs, it purgeth the brain by ſneezing, and drawing down rheums, and other viſcous humours, which, by their diſtillation upon the lungs and cheſt, cauſe coughing; when taken inwardly, it operates more forcibly if mixed with honey. The decoction of the ſeed made in wine, provoketh urine, reſiſts the force of poiſon, the malignity of muſhrooms, and the venom of ſcorpions, or other poiſonous animals, if it be taken in time. If adminiſtered before cold fits of the ague come on, it altereth, leſſeneth, and cureth, them. The ſeed, taken either by itſelf, or with other things, either in an electuary or drink, is a great incentive to venery, and helpeth the ſpleen, pains in the ſide, and gnawing in the bowels. If uſed as a gargle, it draweth up the palate of the mouth, when fallen down. It alſo diſſolveth ſwellings about the throat, if it be applied externally. Being chewed in the mouth, it oftentimes helpeth the tooth-ach. The outward application hereof upon the pained place, in caſes of the ſciatica, diſcuſſeth the humours, and eaſeth the pains: as alſo of the gout, and other joint-achs. It is frequently uſed to eaſe pains of the ſides, loins, ſhoulders, or other parts of the body, by applying thereof as a bliſter, and cureth the diſeaſe by drawing it to the outward part of the body; it is alſo uſed to help the falling of the hair. The ſeed, bruiſed, and mixed with honey or wax, taketh away the black and blue marks occaſioned by falls or other bruiſes; the roughneſs or ſcabbineſs of the ſkin; as alſo the leproſy and louſy evil; it helpeth alſo the crick in the neck. The diſtilled water of the herb, when it is in flower, is much uſed to drink inwardly for any of the diſeaſes aforeſaid, and to waſh the mouth when the palate is down; and as a gargle for diſeaſes of the throat; alſo outwardly for ſcabs, itch, or other ſuch infirmities; and cleanſeth the face from morphew, ſpots, freckles, and other deformities.

People who are fond of muſic, and who would wiſh to improve their voices, have only to mix ſome of the powder of muſtard ſeed with honey into balls, and, by ſwallowing one or two every morning faſting, in a ſhort time they will find their voices to be clear. Muſtard ſeed and onions, mixed together, provoke weeping.

## HEDGE-MUSTARD.

Description. THIS groweth up uſually but with one blackiſh green ſtalk, tough, eaſy to bend, but not break, branched into divers parts, and ſometimes with divers ſtalks ſet full of branches, whereon grow long, rough, or hard, rugged leaves, very much torn or cut on the edges into many parts, ſome larger and ſome ſmaller, of a dirty green colour; the flowers are ſmall and yellow, growing at the tops of the branches in long ſpikes, flowering by degrees; the ſtalks have ſmall round pods at the bottom, growing upright, and cloſe to the ſtalk, whilſt the flowers yet ſhew themſelves; in which are contained ſmall yellow ſeed, ſharp and ſtrong, as the herb is alſo. The root groweth down ſlender and woody, yet abiding, and ſpringing again every year.

Place. This groweth generally by the roads and hedge-ſides; but ſometimes in the open fields.

Time. It flowereth uſually about July.

Government and Virtues. Mars owns this herb alſo. It is ſingularly good in all the diſeaſes of the cheſt and lungs, hoarſeneſs of voice; and, by the uſe of the decoction thereof, ſome have been recovered who had utterly loſt their voices, and nearly their ſpirits alſo. The juice of this herb, made into a ſyrup with honey or ſugar, is no leſs effectual for the ſame purpoſes, and for coughs, wheeſing, and ſhortneſs of breath. It is alſo ſerviceable to thoſe who have the jaundice, the pleuriſy, pains in the back and loins, and for torments in the belly, or the cholic; it is alſo uſed in clyſters. The ſeed is held to be a ſpecial remedy againſt poiſon and venom, is ſingularly good for the ſciatica, the gout, and all joint-achs, ſores and cankers in the mouth, throat, or behind the ears; it is alſo equally ſerviceable in reducing the hardneſs and ſwelling of the teſticles, and of women's breaſts.

## MASTIC TREE.

Names. IT is called in Latin *lentiſcus*, and the gum or roſin, *reſina lentiſcina*, and *maſtiche*, and *maſtix*; in Engliſh, maſtic.

Description. The maſtic or lentiſk tree groweth like a tree when ſuffered to grow up; and often it riſeth but as a ſhrub; the body and branches are of a reddiſh colour; tough and gentle, having their ends bending ſomewhat downwards, whereon do grow winged dark-green leaves, conſiſting of four couple, ſtanding one againſt another, of the bigneſs of the large myrtle-leaf, with a reddiſh circle about their edges, and ſomewhat reddiſh veins on the under-ſide, ſmelling ſweet, and always continuing green; the flowers grow in cluſters at the joints, with the leaves, being ſmall and of a pale purple-green colour; after them come ſmall blackiſh berries, of the ſize of a pepper-corn, with a hard black ſhell under the outer ſkin, and a white kernel within; it beareth alſo certain horns, with a clear liquor in them that turneth into ſmall flies. It yieldeth alſo a clear white gum, in ſmall drops, when the ſtocks are cut in ſundry places; which is carefully gathered and preſerved.

Place. The lentiſk-tree groweth in Provence, in France; and alſo in divers parts of Italy; in Candia, and many other places in Greece; but yieldeth little gum there, eſpecially in the iſle of Scio.

Time. It flowereth in April, and the berries are ripe in September; it is pruned and manured with as great care by the cultivators as others do their vines; the profit ariſing from the gum being much greater.

Government and Virtues. The lentiſk-tree is under the influence of Jupiter. It is of moderately hot temperature; but the root, branches, bark, leaves, fruit, and gum, are all of a binding quality, ſtopping all fluxes and ſpitting of blood; ſtrengthens a weak ſtomach, and helps falling down of the mother and fundament. The decoction healeth up hollow ſores, knitteth broken bones, faſteneth looſe teeth, and ſtayeth the ſpreading of ſores, they being fomented therewith. The oil which is preſſed out of the berries, helpeth the itch, leproſy, add ſcab, both in man and beaſt; gum-maſtic hath the like virtue of ſtaying fluxes, taken any way in powder; or, if three or four grains of it be ſwallowed whole at night when going to bed, it not only eaſeth the pains of the ſtomach, but hindereth its being affected afterwards; the powder of maſtic, with amber and turpentine, is good againſt the running of the reins, and to check the fluor albus and menſes in women. The powder of maſtic is alſo materially uſeful in ſtopping thin rheums from falling upon the lungs, which occaſion a continual cough and ſpitting of blood.

## The MEALY TREE.

Names. IT is called in Latin *viberuum*; it is alſo called the way-faring tree; and by Mr. Parkinſon, from the pliability of the twigs and branches, the pliant mealy tree.

Description. This tree hath (from a ſmall body, iſing to the height of a hedge-tree, or buſh, covered with a dark-greyiſh bark) ſundry ſmall ſhort but very tough and pliant branches, of a finger's thickneſs, whoſe bark is ſmooth and whitiſh, whereon grow broad leaves, like elm-leaves, but long and hoary, rough, thick, and white like meal, and a little hairy, ſet by couples, and finely dented about the edges; at the ends of the branches ſtand large tufts of white flowers, which turn into large bunches of round and flat ſeed, like that of the lentil, but larger; green when they are firſt formed, and for a conſiderable time afterwards, but black when they are ripe.

The branches thereof are ſo tough and ſtrong that they ſerve for bands to tie bundles, or any other thing; or to make faſt gates leading into fields, for which purpoſes they are better adapted than withy, or any thing of that nature.

Place. It groweth as a hedge-buſh, and is often cut and plaſhed by country people to ſpread on the hedges; is very frequently found in Kent, and in many other parts of this kingdom.

Time. It flowereth about the end of May, and the fruit is ripe in September.

Government and Virtues. It is a plant of Saturn. The leaves thereof have a harſh binding quality, and are good to ſtrengthen and faſten looſe teeth. The decoction of the leaves thereof, and of olive-leaves together, in vinegar and water, is exceeding good to waſh the mouth and throat when ſwelled by ſharp humours falling into them; reſtores the uvula or palate of the mouth to its right place, when fallen down; it alſo ſtays the rheums that fall upon the jaws. The kernels of the fruit hereof, taken before they are ripe, dried and made into powder, and drunk in any liquid, ſtop looſeneſs of the belly, and all ſorts of fluxes. Of the roots, being ſteeped under ground, then boiled, and beaten a long time afterwards, bird-lime is made to catch ſmall birds.

The leaves, boiled in lye, keep the hair from falling off the head, and change the colour into black.

## MAY-WEED.

Kinds and Names. THERE are ſound three ſorts of may-weed. 1. *Cotula fœtida*, ſtinking may-weed. 2. *Cotula non fœtida*, may-weed with no ſcent. Stinking may-weed groweth more upright than that which hath no ſmell, or the common camomile; neither of them creep or run on the ground as camomile doth; the leaves are longer and larger than thoſe of camomile, yet very like unto it, but of a paler green colour; the one ſort hath a very ſtrong ſmell, the other no ſcent at all; the flowers are like thoſe of camomile, but larger; there is alſo a ſort of may-weed found in various parts of the kingdom, which hath double flowers, almoſt as large as double camomile-flowers, which is called *cotula flore pleno.*

Place. The ſtinking may-weed groweth abundantly among corn, and will bliſter the hands of the reapers; that which ſtinketh not groweth alſo very plentifully, wild, in many places, and often amongſt wild camomile.

Time. They flower all the ſummer months, ſome earlier and ſome later.

Government and Virtues. May-weed is governed by Mars, yet Galen ſaith the ſophi of the Egyptians conſecrated camomile to the ſun, which is much of the ſame temperature, but the ſtinking may-weed is more hot and dry, and is uſed for the ſame purpoſes as camomile, viz. to diſſolve tumours, expel wind, and to eaſe pains and achs in the joints and other parts; it is alſo good for women whoſe matrix is fallen down, or looſened from one ſide to the other, by waſhing their feet with a decoction thereof made in water. It is likewiſe good to be given to ſmell to by ſuch as are troubled with the riſing or ſuffocation of the matrix.

## MAD-WORT.

Place. IT is often ſown in gardens. The ſeed comes from Italy.

Time. It flowers and flouriſhes in May; the ſeed is ripe in Auguſt.

Qualities and Virtues. It is dry, digeſting, and ſcouring. It healeth the bite of a mad dog, the morphew, ſun-burning, &c. It alſo heals wounds inwardly and outwardly, cancers, and filthy ulcers; and digeſteth clotted blood.

## MANDRAKE.

THE mandrake is male and female.

Place. It grows in hot regions; woods, mountains, and gardens.

Time. It ſprings in March, flowers in April; the fruit is ripe in Auguſt.

Qualities and Virtues. It is of a cold nature. The root is phlegmatic, and may be eaten with pepper and hot ſpices. The apples are cold and moiſt; the bark of the root cold and dry, and the juice is good in all cooling ointments. The dried juice of the root, taken in a ſmall quantity, purgeth phlegm and melancholy. In collyriums, it healeth pains of the eyes. In a peſſary, it draweth forth the dead child and ſecundine. The green leaves, bruiſed with auxungia and barley-meal, heal all hot ſwellings and inflammations; and, applied to the parts, conſume hot ulcers and impoſthumes. A ſuppoſitory made of the juice, put into the fundament, cauſeth ſleep. Infuſed in wine, and drunk, it cauſeth ſleep, and healeth pains; the apples ſmelt to, or the juice taken in a ſmall quantity, alſo cauſe ſleep. The ſeed and fruit do cleanſe the womb; the leaves heal knots in the fleſh, and the roots heal Saint Anthony's fire, &c. and, boiled with ivy, mollify the ſame. The oil of mandrakes is very cold; yet it may be anointed upon the temples and noſes of thoſe that have a phrenzy; if the patient ſleep too long, dip a ſponge in vinegar, and hold it to the noſe. Alſo, it heals vehement pains of the head, and the tooth-ach, when applied to the cheeks and jaws, and cauſeth ſleep.

## MUSHROOM.

Description. Muſhrooms are plants more perfect than many people imagine. They have a regular root, a ſtalk conſiſting of ſeveral arrangements of fibres, the interſtices of which are filled up with a parenchymatous ſubſtance, leading from the root to the head or umbel; the under-ſide of this umbel is full of lamellæ, or chives, every one of which is a regular pod, or ſeed-veſſel. If theſe lamellæ are examined in their ſeveral ſtates, the ſeeds in them may be eaſily diſcovered, and are always found to be of a ſize and degree of maturity proportioned to the ſtate of the plant at the time. They have each of them alſo a ſiliquaceous aperture lengthwiſe, the ſeeds lying in rows ready to fall through it. The plant is eaſily and regularly propagated through theſe, and not only may be raiſed from ſeed; but, like many other plants, may be propagated by roots; ſeveral filaments at the root producing tubercles, in the manner of the potatoe, from each of which there will ariſe new roots and a new plant. The periods of vegetation in this plant are alſo ſufficiently regular; and the common opinion, of its ſpringing up in a night and periſhing in a day, has no foundation in reality; for, in the common way of raiſing them on hot-beds, it is eaſy to find, that they often ſtand a fortnight or longer, from their firſt appearance, before they are fit for the table.

Mr. Bradley mentions an hundred kinds of muſhrooms which he has ſeen in England, beſides thoſe very numerous ſmall ones which conſtitute the mouldineſs of liquors, fruits, &c. Mathiolus mentions muſhrooms which weighed thirty pounds each, and were as yellow as gold. Fer. Imperatus tells us, he ſaw ſome which weighed above one hundred pounds apiece; and the Journal des Sçavans furniſhes us with an account of ſome, growing on the frontiers of Hungary, which made a full cart-load.

The poiſon of muſhrooms has been much talked of by ſeveral perſons; but there ſeems to be no certain account of any body's having ever been injured by eating the common muſhroom; though there are perhaps ſome kinds of them that are truly poiſonous. The ancients have taken great pains to diſtinguiſh the ſeveral kinds of them, that the world might know the hurtful from the ſafe. The boletos, mentioned by Juvenal, on account of the death of Claudius, is ſufficiently deſcribed by Pliny. Cluſius, among the moderns, has deſcribed a vaſt number of different ſpecies, every where diſtinguiſhing the eſculent and wholeſome from the poiſonous and pernicious kinds. The ſeveral authors who have treated of them ſince the time of Cluſius, have all mentioned the effects of ſome or other of the poiſonous kinds, and there are numerous inſtances of the miſchief done by them at one time or other. The true eatable muſhroom is diſtinguiſhed from the poiſonous and unpleaſant kinds by theſe marks: When young, it appears of a roundiſh form, like a button, the ſtalk as well as the button being white, and the fleſhy part very white when broken, the gills within being livid. As they grow larger, they expand their heads by degrees into a flat form, and the gills underneath are of a pale fleſh colour; but, as they ſtand long, become blackiſh.

Virtues. The Laplanders have a method of uſing *funguſes*, or toadſtools as we call them, (which are of the ſame genus with the muſhroom,) to cure pains. They collect the largeſt funguſes which they find on the bark of beech and other large trees, and dry them for uſe. Whenever they have pains their limbs, they uſe ſome of this dry matter; pulling it to pieces with their fingers, they lay a ſmall heap of it on the part neareſt to where the pain is ſituated, and ſet it on fire. In burning away, it bliſters up the part, and the water diſcharged thereby generally carries off the pain. It is a coarſe and rough method, but generally a very ſucceſsful one, eſpecially when the patient has prudence enough to apply it in time, and reſolution enough to bear the burning to a neceſſary degree.

## NAILWORT, or WHITLOW-GRASS.

Description. THIS very ſmall and common herb hath no roots, ſave only a few ſtrings; neither doth it ever grow to be above a hand's-breadth high; the leaves are very ſmall, and ſomething long, not much unlike thoſe of chickweed, amongſt which riſe up many ſlender ſtalks, bearing numerous white flowers one above another, which are exceeding ſmall; after which come ſmall flat pouches containing the ſeed, which is alſo very ſmall, but of a ſharp taſte.

Place. It grows commonly upon old ſtone and brick walls, and ſometimes in dry gravelly grounds, eſpecially if there be graſs or moſs near to ſhadow it.

Time. They flower very early in the year, ſometimes in January and in February; before the end of April they are no longer to be found.

Virtues. It is held to be an exceeding good remedy for thoſe impoſthumes in the joints, and under the nails, which they call whitlows, felons, adicoms, and nail-wheals.

## NEP, or CATMINT.

Description. COMMON garden nep ſhooteth forth hard four-ſquare ſtalks with a hoarineſs on them, a yard high or more, full of branches, bearing at every joint two broad leaves, ſomewhat like balm, but longer pointed, ſofter, whiter, and more hoary, nicked about the edges, and of a ſtrong ſweet ſcent. The flowers grow in large tufts at the tops of the branches, and underneath them likewiſe on the ſtalks, many together, of a whitiſh purple colour. The roots are compoſed of many long ſtrings or fibres, faſtening themſelves ſtrongly in the ground, and retaining their leaves green all the winter.

Place. It is only nurſed up in our gardens.

Time. It flowereth in July, or thereabouts.

Government and Virtues. It is an herb of Venus. Nep is generally uſed by women, being taken either inwardly or outwardly, either alone or with other convenient herbs, in a decoction to bathe them, or to ſit over the hot fumes thereof, and by the frequent uſe thereof it taketh away barrenneſs, and the wind, and pains of the mother. It is alſo uſed for pains of the head ariſing from any cold cauſe, ſuch as catarrhs, rheums, &c. and for ſwimming and giddineſs thereof, and is of eſpecial uſe for expelling wind from the ſtomach and belly. It is alſo effectual for the cramp, or other pains occaſioned by cold; and is found ſerviceable for colds, coughs, and ſhortneſs of breath. The juice thereof, drunk in wine, helps bruiſes. The green herb, bruiſed, and applied to the part for two or three hours, eaſeth the pain ariſing from the piles. The juice alſo, being made up into an ointment, is effectual for the ſame purpoſe. Waſhing the head with a decoction thereof taketh away ſcabs; and may be uſed to the like effect on other parts of the body.

## NETTLES.

NETTLES are ſo well known that they need no deſcription.

Government and Virtues. This herb Mars claims dominion over. Nettle-tops, eaten in the ſpring, conſume the phlegmatic ſuperfluities in the body, which the coldneſs and moiſture of winter hath left behind. The roots or leaves boiled, or the juice of either of them, or both, made into an electuary with honey or ſugar, is a ſafe and ſure medicine to open the pipes and paſſages of the lungs, obſtruction in which is the cauſe of ſhortneſs of breath, and helpeth to expectorate tough phlegm, as alſo to raiſe the impoſthumated pleuriſy, and evacuate it by ſpitting; the juice of nettles, uſed as a gargle, allayeth the ſwelling of the almonds of the throat; it alſo effectually ſettles the palate of the mouth in its place, and heals and tempers the ſoreneſs and inflammation of the mouth and throat. The decoction of the leaves in wine, being drunk, is very efficacious in moſt of the diſeaſes peculiarly incident to the female ſex; and is equally ſerviceable, when applied externally, mixed with myrrh. The decoction alſo, or the ſeed, provoketh urine, and has hardly ever been known to fail in expelling the gravel and ſtone from the reins and bladder; killeth worms in children; eaſeth the ſpleen occaſioned by wind, and expelleth the wind from the body; though ſome think them only a provocative to venery. The juice of the leaves, taken two or three days together, ſtayeth bleeding at the mouth. The ſeed, being drunk, is a remedy againſt the ſting of venomous creatures, the bite of a mad dog, the poiſonous qualities of hemlock, henbane, nightſhade, mandrake, or other ſuch like herbs, that ſtupify and dull the ſenſes; as alſo the lethargy, eſpecially if uſed outwardly, by rubbing the forehead and temples in lethargic caſes, and the places bitten or ſtung by beaſts, with a little ſalt. The diſtilled water of the herb is alſo effectual (although not ſo powerful) for the diſeaſes aforeſaid, and for outward wounds and ſores, to waſh them, and to cleanſe the ſkin from morphew, leproſy, and other diſcolourings thereof. The ſeed, or leaves, bruiſed, and put into the noſtrils, ſtayeth the bleeding thereof, and taketh away the fleſh growing in them, called *polypus*. The juice of the leaves, or the decoction of them, or of the roots, is very good to waſh either old, rotten, or ſtinking, ſores; fiſtulas, and gangrenes, and ſuch as are fretting, eating, and corroding; ſcabs, mangineſs, and itch, in any part of the body; as alſo green wounds, by waſhing them therewith, or applying the green herb bruiſed thereunto, even although the fleſh ſhould be ſeparated from the bones. The ſame, on being applied to the limbs, when wearied, refreſheth them, and ſtrengtheneth, drieth, and comforteth, ſuch places as have been put out of joint, after having been ſetting in; as alſo ſuch parts of the human body as are ſubject to the gout or other achs, greatly eaſing the pain thereof; and the defluxion of humours upon the joints or ſinews it alſo relieveth, by drying up or diſperſing the defluxions. An ointment made of the juice, oil, and a little wax, is exceedingly good to rub cold and benumbed members. An handful of green nettles, and another of wall-wort, or Dane-wort, bruiſed and applied ſimply of themſelves, to the gout, ſciatica, or joint-achs, in any part, hath been found to be an admirable help in complaints of that nature.

## NIGHTSHADE.

Description. COMMON nightſhade hath an upright, round, green, hollow, ſtalk, about a foot or half yard high, ſhooting forth into many branches, whereon grow numerous green leaves, ſomewhat broad and pointed at the ends, ſoft and full of juice, ſomewhat like unto baſil, but larger, and a little unevenly dented about the edges; at the tops of the ſtalks and branches, come forth three or more white flowers compoſed of five ſmall pointed leave apiece, ſtanding on a ſtalk together one above another, with yellow pointels in the middle, compoſed of four or five yellow threads ſet together, which afterwards turn into ſo many pendulous green berries of the bulk of ſmall peas, full of green juice, and ſmall whitiſh round flat ſeed lying within it. The root is white, and a little woody when it hath given flowers and fruit, with many ſmall fibres at it. The whole plant is of a watery inſipid taſte; but the juice within the berries is ſomewhat viſcous, and of a cooling and binding quality.

Place. It groweth wild in this kingdom, and in rubbiſh, the common paths and ſides of hedges, in fields; and alſo in gardens without any planting.

Time. It dieth annually, and riſeth again of its own ſowing; but ſpringeth not until the latter end of April at the ſooneſt.

Government and Virtues. It is a cold ſaturnine plant. The common nightſhade is wholly uſed to cool hot inflammations, either inwardly or outwardly, being no ways dangerous, as the other nightſhades are; yet it muſt be uſed moderately; the diſtilled water only of the whole herb is fitteſt and ſafeſt to be taken inwardly; the juice, being clarified and mixed with a little vinegar, is very good to waſh the mouth and throat, when inflamed. Outwardly, the juice of the herb or berries with a little vinegar and ceruſe, pounded together in a leaden mortar, is very good to anoint all hot inflammations in the eyes; it is alſo very good for the ſhingles, ringworms, and in all running, fretting, and corroding, ulcers; and in moſt fiſtulas, if the juice be mixed with hen's-dung and applied thereunto. A cloth, wet in the juice, and applied to the teſticles, when ſwelled, giveth much eaſe, as alſo to the gout which ariſeth from hot and ſharp humours. The juice dropped into the ears eaſeth pains thereof, ariſing from heat or inflammation. Pliny ſaith, it is good for hot ſwellings under the throat. Care muſt be taken that the deadly nightſhade is not miſtaken for this.

DEADLY

## DEADLY NIGHTSHADE.

Description. THE flower is bell-ſhaped; it hath a permanent empalement of one leaf, cut into five parts; it hath five ſtamina riſing from the baſe of the petal; in the centre is ſituated an oval germen, which becomes a globular berry, having two cells ſitting on the empalement, and filled with kidney-ſhaped ſeed. It is of a cold nature; in ſome it cauſeth ſleep; in others madneſs, and, ſhortly after, death.

This plant ſhould not be ſuffered to grow in any places where children reſort, for it is a ſtrong poiſon; ſeveral inſtances having happened where children have been killed by eating the berries.

There is a remarkable inſtance of the direful effects of this plant recorded in Buchanan's Hiſtory of Scotland; wherein he gives an account of the deſtruction of the army of Sweno, when he invaded Scotland, by mixing a quantity of the juice of theſe berries in the drink which the Scots, by the truce, were to ſupply them with; this ſo intoxicated the Danes, that the Scots fell upon them in their ſleep, and killed the greateſt part of them; ſo that there were ſcarcely men enough left to carry off their king.

## WOODY NIGHTSHADE.

CALLED alſo *bitter ſweet*, *dulc'amara*, and *amara dulcis*.

Place. It grows by the ſides of hedges, and in moiſt ditches, climbing upon the buſhes; with winding, woody, but brittle, ſtalks.

Time. It is perennial, and flowers in June and July.

Virtues. The roots and ſtalks, on firſt chewing them, yield a conſiderable bitterneſs, which is ſoon followed by an almoſt honey-like ſweetneſs; and they have been recommended in different diſorders, as high reſolvents and deobſtruents. Their ſenſible operation is by ſweat, urine, and ſtool; the doſe from four to ſix ounces of a tincture made by digeſting four to ſix ounces of the twigs in a quart of white wine.

## NAVEL-WORT, or PENNY-WORT.

Names and Kinds. IT is called *umbilicus veneris* and *herba coxendicum*. There are ſeven different kinds.

Description and Virtues. 1. The ſmall navel-wort is moiſt and ſomewhat cold and binding. It cooleth and repelleth; ſcoureth and conſumeth.

2. The water penny-wort is hot and ulcerating, like crows-foot; and is very dangerous to cattle who may occaſionally feed thereon.

3. The baſtard Italian navel-wort partakes of the true in cold and moiſture.

4. The juice of the wall penny-wort healeth all inflammations and hot tumours, as the eryſipelas, or St. Anthony's fire; it healeth kibed heals, being bathed therewith and the leaves applied. The leaves and root break the ſtone, provoke urine, and cure the dropſy. The diſtilled water healeth ſore kidneys, pains of the bowels, piles, gout, and king's evil.

5. The common or one ſummer's navel-wort is diuretic, not very hot, but exceeding dry. It provoketh urine, and digeſteth ſliminefs in the joints. Two drachms drunk in wine will expel much urine from dropſical perſons; and, applied, will alſo eaſe the gout.

6, 7. The ſpotted and ſmall red-flowered navel-wort are cold and moiſt, like houſe-leek.

Place. The firſt ſort groweth on ſtone walls; the other ſorts are only found on the Alps.

Time. They flower in the beginning of the ſpring, but flouriſh all the winter.

## NIPPLEWORT.

Names and Kinds. Of this there are three kinds: 1. The ordinary nipplewort, called in Latin *lampſana vulgaris*. 2. The nipplewort of Auſtria, called *lampſa a papillaris*. 3. Wild or wood baſtard-nipplewort, *ſoncho affinis lampſana ſylvatica*. And in Pruſſia, as ſaith Camerarius, they call it *papillaris*.

Description. 1. The ordinary nipplewort groweth with many hard upright ſtalks, whereon grow dark-green leaves from the bottom to the top, but the higher the ſmaller; in ſome places without dents in the edges, and in others with a few uneven jags therein, ſomewhat like a kind of hankweed; the tops of the ſtalks have ſome ſmall long branches, which bear many ſmall ſtar-like yellowiſh flowers on them, which turn into ſmall ſeed; the root is ſmall and fibrous; the plant yieldeth a bitter milk like that of the ſow-thiſtle.

2. The Auſtrian nipplewort hath ſlender, ſmooth, and ſolid, ſtalks, not eaſily broken, about two feet high, whereon ſtand without order, ſomewhat long and narrow leaves, broadeſt in the middle, and ſharp at the ends, waved a little about the edges, and compaſſing them at the bottom, yielding a little milk; from the upper joints, with the leaves, grow forth ſmall firm branches, yet a little bending, bearing each of them four or five long green huſks, and in them ſmall purpliſh

flowers of five leaves each, notched in at the broad ends, with ſome ſmall threads in the middle; which turn into down, and are blown away with the wind: the root is ſmall and ſhreddy, and laſteth many years.

3. The wild or wood baſtard-nipplewort is like unto the firſt ſort, but with ſomewhat broader leaves, and greater ſtore of branches: but in the flowers, and other parts, not much different.

Place and Time. The firſt groweth common, almoſt every where, upon the banks of ditches and borders of fields; the ſecond, Cluſius ſaid he found in Hungary and Saxony, and other places; the laſt is found near the ſides of woods, and hedge-rows; they flower in ſummer, and the ſeed is ripe ſoon after.

Government and Virtues. Theſe are the plants of Venus, and kindly endued with a peculiar faculty for the healing of ſore nipples of women's breaſts; for which reaſon Camerarius ſaith that in Pruſſia they call it *papillaris*, becauſe of its excellent virtues in healing women's ſore breaſts, as well as their nipples, when they are exulcerated; it having a ſingular healing quality therein; and is temperate in heat and drineſs, with ſome tenuity of parts able to digeſt the virulency of ſharp humours which break out into thoſe parts.

## The NUTMEG-TREE, and MACE.

Names and Description. THE fruit of this tree is called in Latin *nux myſtica*, and in ſhops *nux moſcata*. The tree groweth very tall, like our pear-trees; having leaves always green, ſomewhat reſembling the leaves of the orange-tree; the fruit groweth like our walnuts, having an outer thick huſk; which, when it grows ripe, openeth itſelf as the ſhell of the walnut doth; ſhewing the nut within covered with the mace, which is of an orient crimſon colour while it is freſh, but the air changeth the colour to be more dead and yellowiſh.

Government and Virtues. The nutmegs and maces are both ſolar, of temperature hot and dry in the ſecond degree, and ſomewhat aſtringent, and are good to ſtay the laſk; they are effectual in all cold griefs of the head or brain, for palſies, ſhrinking of ſinews, and diſeaſes of the mother; they cauſe a ſweet breath, and diſcuſs wind in the ſtomach or bowels, quicken the ſight and comfort the ſpirits, provoke urine, increaſe ſperm, and are comfortable to the ſtomach; they help to procure reſt and ſleep, being laid to the temples, by allaying the diſtemper of the ſpirits.

The way to uſe it to procure reſt is, to take two pieces of red roſe-cake and warm them in vinegar over a chafing-diſh of coals, then ſcrape nutmeg upon the cakes, and bind it warm to the temples.

The mace is of the ſame property, but ſomewhat more warming and comforting than the nutmeg; the thick oil that is drawn from both nutmegs and mace is good in pectoral complaints, to warm a cold ſtomach, help the cough, and to dry up diſtillations of rheum falling upon the lungs.

## THE OAK

IS ſo well known (the timber thereof being the glory and ſafety of the Britiſh nation) that it needeth no deſcription.

GOVERNMENT AND VIRTUES. Jupiter owns the tree. The leaves and bark of the oak, and the acorn cups, do bind and dry very much; the inner bark of the tree, and the thin ſkin that covereth the acorn, are moſt uſed to ſtay the ſpitting of blood, and the bloody flux; the decoction of the bark, and the powder of the cups, ſtay vomiting, ſpitting of blood, bleeding at the mouth, or other fluxes of blood in men or women: laſks alſo, and the involuntary flux of natural ſeed. The acorns in powder taken in wine, provoke urine, and reſiſt the poiſon of venomous creatures. The decoction of acorns and the bark made in milk, and taken, reſiſteth the force of poiſonous herbs and medicines, as alſo the virulency of cantharides, when any perſon, by eating them, hath the bladder exulcerated, and evacuateth blood. Hippocrates ſaith, he uſed the fumes of oak-leaves to women that were troubled with the ſtrangling of the mother; and Galen applied them, being bruiſed, to cure green wounds. The diſtilled water of the oaken buds, before they break out into leaves, is good to be uſed either inwardly or outwardly to aſſuage inflammations, and ſtop all manner of fluxes in man or woman; it is alſo ſingularly good in peſtilential and hot burning fevers, as it reſiſteth the force of the infection, and allayeth the heat; it cooleth the heat of the liver, breaketh the ſtone in the kidneys, and ſtayeth women's courſes. The decoction of the leaves hath the ſame effects. The water that is found in the hollow places of old oaks, is very effectual againſt any foul or ſpreading ſcab. The diſtilled water or decoction (which laſt is preferable) of the leaves, is one of the beſt remedies known for the fluor albus.

## OATS.

THIS grain is well known: *avena* is the Latin name; they are grown in every quarter of the globe where agriculture is carried on. They are ſown in ſpring, and mown or reaped in September and October; but in the northern parts of this kingdom it is frequently much later before they are cut down.

Nature and Virtues. They are ſomewhat cold and drying, and are more uſed for food, both for man and beaſt, than for phyſic; yet, being quilted in a bag with bay ſalt, made hot in a frying-pan, and applied as warm as can be endured, they eaſe pains and ſtitches in the ſide; and the cholic in the belly. A poultice made of the meal of oats and oil of bays, helpeth the itch, leproſy, and fiſtulas, and diſcuſſeth hard impoſthumes. Oatmeal boiled in vinegar, and applied, takes away ſpots and freckles in the face or other parts of the body. It is alſo uſed in broth or milk, to bind thoſe who have a laſk, or other flux; and with ſugar it is good for them that have a cough or cold. Raw oatmeal is an unwholeſome diet.

## ONE-BLADE.

Description. THIS ſmall plant never beareth more than one leaf, except only when it riſeth up with its ſtalk, in which caſe it beareth another, but ſeldom more, which are of a bluiſh green colour, pointed, with many ribs or veins therein, like plantain; at the top of the ſtalk grow many ſmall white flowers, in the form of a ſtar, ſmelling ſomewhat ſweet; after which come ſmall berries, of a reddiſh colour when they are ripe. The root is ſmall, of the bigneſs of a ruſh, lying and creeping under the upper cruſt of the earth, ſhooting forth in divers places.

Place. It groweth in moiſt, ſhadowy, and graſſy, places of woods, in moſt parts of the kingdom.

Time. It flowereth about May; the berries are ripe in June; it then quickly periſheth until the next year, when it ſpringeth afreſh from the old root.

Government and Virtues. It is a precious herb of the ſun. Half a drachm, or at moſt a drachm, in powder of the roots, taken in wine and vinegar, of each equal parts, and the party laid directly down to ſweat thereupon, is held to be a ſovereign remedy for thoſe that are infected with the plague, and have a ſore upon them, by expelling the poiſon and infection, and defending the heart and ſpirits from danger. It is an exceeding good wound-herb, and is therefore uſed with others of the like nature, in making compound balms for curing wounds, either whether they are freſh and green, or old and malignant, and eſpecially if the ſinews have been burnt.

Pena and Lobel ſeverally made experiments of the quality of this plant, upon two dogs, and found it was not dangerous, but effectual to expel the deadly operation of corroſive ſublimate and arſenic.

## ORCHIS.

IT hath a great variety of names, though moſt generally known by this.

Description. To enumerate all the different ſorts of it is needleſs; a deſcription of the roots will be ſufficient, which are to be uſed with ſome diſcretion. They have each of them a double root within, ſome of them round, others like a hand; theſe roots alter every year alternately; when the one riſeth and waxeth full, the other groweth lank and periſheth; now it is thoſe which are full-grown that are to be uſed in medicine, the other being either of no uſe at all, or elſe, according to ſome, thwarting the operation of the full-grown root, and undoing what otherwiſe it might have effected.

Time. One or other of them may be found in flower from the beginning of April to the latter end of Auguſt.

Government and Virtues. They are hot and moiſt in operation; under the dominion of Venus, and provoke luſt exceedingly; which, it is ſaid, the dry and withered roots reſtrain again; they are held to kill worms in children; alſo, being bruiſed and applied to the place, to help the king's evil.

## ONIONS.

THEY are ſo well known that their deſcription is unneceſſary.

Government and Virtues. Mars owns them. They poſſeſs the quality of drawing corruption to them, for, if you peel one and lay it upon a dunghill, you will find it rotten in half a day, by drawing putrefaction to it; it is therefore natural to ſuppoſe they would have the ſame attractive power if applied to a plague-ſore.

Onions are flatulent, or windy, yet do they whet the appetite, increaſe thirſt, and eaſe the belly and bowels; provoke the menſes; help the bite of a mad dog, and other venomous creatures, when uſed with honey and rue, and increaſe ſperm; eſpecially the ſeed of them; they alſo kill the worms in children, if they drink the water faſting wherein they have been ſteeped all night. Being roaſted under the embers, and eaten with honey, or ſugar and oil, they conduce much to help an inveterate cough, and expectorate the tough phlegm. The juice, being ſnuffed up into the noſtrils, purgeth the head, and helpeth the lethargy; yet the eating them too frequently occaſions the head-ach. The eating of onions, faſting, with bread and ſalt, is held to be a good preſervative againſt infection. If a great onion is made hollow, filling the place with good treacle, afterwards roaſting it on the embers, then throwing away the outward ſkin, and beating the remainder well together, is accounted a ſovereign remedy for either the plague-ſore or any other putrid ulcer. The juice of onions is reckoned good for ſcalds or burns, occaſioned either by fire, boiling water, or gunpowder; and, uſed with vinegar, taketh away all blemiſhes, ſpots, and marks, in the ſkin; and, dropped into the ears, eaſeth the pain and noiſe thereof. If applied, beaten together with figs, they help to ripen, and cauſe ſuppuration in, impoſthumes.

Onions, if bruiſed, and mixed with ſalt and honey, will effectually deſtroy warts, cauſing them to come out by the roots.

Leeks participate of nearly the ſame quality as onions, though not in ſo great a degree. They are ſaid to be an antidote againſt a ſurfeit occaſioned by the eating of muſhrooms, being firſt baked under the embers, and then taken when ſufficiently cool to be eaten; being boiled, and applied warm, they help the piles.

## ORPINE.

Description. COMMON Orpine riſeth up with divers round brittle ſtalks thick ſet with fat and fleſhy leaves, without any order, and very little dented about the edges, of a pale green colour; the flowers are white, or whitiſh, growing in tufts, after which come ſmall chaff-like huſks, with ſeed like duſt in them. The roots are various in their ſhape and ſize, and the plant does not grow ſo large in ſome places as in others.

Place. It is to be found in almoſt every part of this kingdom, but moſt commonly in gardens, where it groweth to a larger ſize than that which is wild; it is alſo to be found in the ſhadowy ſides of fields and woods.

Time. It flowereth about July, and the ſeed is ripe in Auguſt.

Government and Virtues. The moon owns this herb. Orpine is ſeldom uſed in inward medicines with us, although Trague ſaith, from experience in Germany, that the diſtilled water thereof is profitable for gnawings or excoriations in the ſtomach and bowels, and for ulcers in the lungs, liver, or other inwards parts; as alſo in the matrix; being drunk for ſeveral days ſucceſſively, it helpeth all thoſe diſeaſes; he alſo ſays it ſtayeth the ſharpneſs of the humours in the bloody flux, and other fluxes of the body, or in wounds; the root thereof hath alſo the ſame effect. It is uſed outwardly to cool any heat or inflammation upon any hurt or wound, and eaſeth the pains of them; as alſo to heal ſcalds or burns. The juice thereof beaten with ſome ſallad-oil, and therewith anointing the parts, or the leaf bruiſed and laid to any green wounds in the hands and legs, doth quickly heal them; and, being bound to the throat, much helpeth the quinſey; it is likewiſe found ſerviceable in ruptures.

The juice thereof, made into a ſyrup with honey or ſugar, may be ſafely taken, a ſpoonful or two at a time, and with good effect, for a quinſey; and will be found more ſpeedy in operation, as well as pleaſant in taſte, than ſome other medicines preſcribed for that diſorder.

## OLIVE-TREE.

Kinds and Names. OF theſe there are the tame and manured olive, and the wild olive-tree; the firſt is called in Latin *olea ſativa,* and the wild kind *oleaſter, ſive olea ſylveſtris.*

Description. 1. It has a ſmall tubulous impalement of one leaf, cut into four ſegments at the top; the former conſiſts of one petal, which is tubulous, cut at the brim into four ſegments; it has two ſhort ſtamina, terminated by erect ſummits, and a roundiſh germen, ſupporting a ſhort ſingle ſtyle, crowned by a thick bifid ſtigma; the germen afterwards turns to an oval ſmooth fruit, or berry, with one cell, incloſing an oblong oval nut. In Languedoc and Provence, where the olive-tree is greatly cultivated, they propagate it by truncheons ſplit from the roots of the trees; for, as theſe trees are frequently hurt by hard froſts in winter, ſo, when the tops are killed, they ſend up ſeveral ſtalks from the root; and, when theſe are grown pretty ſtrong, they ſeparate them with an axe from the root; in the doing of which they are careful to preſerve a few roots to the truncheons; theſe are cut off in the ſpring after the danger of the froſt is over, and planted about two feet deep in the ground. Theſe trees will grow in almoſt any ſoil; but, when planted in rich moiſt ground, they grow larger, and make a finer appearance, than in poor land; but the fruit is of leſs eſteem, becauſe the oil made from it is not ſo good as that which is produced in a leaner ſoil; chalky ground is eſteemed beſt for them; and the oil, made from the trees growing in that ſort of land, is much finer, and will keep longer, than the other. In England, the plants are only preſerved by way of curioſity, and are placed in winter in the green-houſe for variety.

2. *Oleaſter,* the wild olive-tree, groweth ſomewhat like unto the manured, but it hath harder and ſmaller leaves, and thicker ſet on the branches, with ſundry ſharp thorns among the leaves; the bloſſoms and fruit come forth in the ſame manner as the other do, and in as great plenty, but much ſmaller, and ſcarcely coming at any

time

time to ripeneſs where they naturally grow; but, where they do become ripe, they are ſmall, with crooked points, and black. Of the olives hereof oil is ſometimes made, which is colder and more aſtringent than the other, and harſher in taſte and greeniſh in colour; but the olives are much reſpected, and gathered to be eaten.

Place and Time. Both kinds of olives grow in the hot countries only; in any cold climate, they will never bear fruit, nor hardly endure a winter; the manured is planted where it groweth, and, according to the nature of the ſoil or climate, produceth larger or ſmaller olives, and in more or leſs plenty; and oil ſweeter or more ſtrong in taſte. The fineſt and ſweeteſt oil comes from the iſles in the Mediterranean ſea, as Zante, Cerigo, &c. that from Majorca, &c. is more full and fat; the oil from Provence, in France, is ſtronger and hotter taſted. The wild olives grow naturally in Spain, Portugal, Italy, and many other countries. They flower in June and July, but their fruit is not ripe until November or December.

Government and Virtues. The olive-tree is a plant of Venus, and of gentle temperature. The green leaves and branches of the olive-tree, but much more of the wild olive, do cool and bind; and the juice thereof, mixed with vinegar, is peculiarly ſerviceable in all hot impoſthumes, inflammations, ſwellings, St. Anthony's fire, fretting or creeping ulcers, and cankers in the fleſh or mouth. The ſame alſo ſtayeth the bleeding of wounds, being applied to the place; the ſaid juice being dropped into the eyes ſtayeth the diſtillation of hot rheums into them, and cleareth the ſight from films or clouds that offend the light, or any ulcer that doth breed therein, or ulcers in the ears.

Pickled olives do ſtir up an appetite to meat, and, although they be hard of digeſtion, yet are pleaſing to the ſtomach, being apt to putrefy therein; they are not good for the eye-ſight, and cauſe the head-ach; if they be dried, and applied to fretting and corroding ulcers, they ſtop their progreſs, and heal them; and take away the ſcars of carbuncles, or plague-ſores. The pickled olives burned, beaten, and applied unto wheals, ſtop their further increaſe, and hinder them from riſing; they cleanſe foul ulcers, help gums that are ſpungy, and faſten looſe teeth.

The water, that is taken from the green wood when heated in the fire, healeth the ſcurf or ſcab in the head, or other parts; the olive-ſtones, being burned, are uſed for the ſame purpoſes, and alſo to heal foul ſpreading ulcers; and, being mixed with fat and meal, they take away the ruggedneſs of the nails.

The other properties of the olive are contained in the oil, and the foot or bottom of the tree. Firſt, the oil has divers and variable virtues, according to the ripeneſs or unripeneſs of the fruit whereof it is made, and then of the time and age thereof, and of the waſhing it from the ſalt wherewith ſome of it is made. The oil that is made of unripe olives is more cooling and binding than that which is made of thoſe that are ripe; which, when it is freſh and new, is moderately heating and moiſtening: but, if it be old, it hath a ſtronger force to warm and diſcuſs, which properties are perceivable by its ſweetneſs; for, if the oil be harſh, it is more cooling than warming; and, if that oil be waſhed, it taketh from it all harſhneſs.

The green oil of unripe olives, while it is freſh, is moſt welcome to the ſtomach; it ſtrengtheneth the gums, and faſteneth the teeth, if it be held in the mouth for any time; and, being drunk, it preventeth too great a perſpiration in thoſe who are ſubject thereunto. The ſweet oil is of moſt uſe in ſallads, &c. being moſt pleaſing to the ſtomach and taſte; but the older the oil is, the better it is for medicine, both to warm any part, and diſcuſs any thing where needful; and to open and move the belly downwards; and is moſt effectual againſt all poiſons, eſpecially thoſe that exulcerate the inteſtines, or, not having paſſed down ſo low, irritate the ſtomach; the oil either bringing it up by vomiting, or at leaſt hindering its malignity from ſpreading. It is alſo a principal ingredient in almoſt all ſalves, helping as well the form as the virtue thereof.

The ſoot or dregs of the oil, the older it is, is the better for various purpoſes, as to heal the ſcab in man or beaſt, being uſed with the decoction of lupines. It is very profitably uſed for ulcers of the fundament or privy parts, when mixed with honey, wine, and vinegar; it healeth wounds, and helpeth the tooth-ach, being held in the mouth; if it be boiled in a copper veſſel to the thickneſs of honey, it bindeth much and is effectual for all the purpoſes for which lycinus may be uſed; if it be boiled with the juice of unripe grapes to the thickneſs of honey, and applied to the teeth, it will cauſe them to fall out.

## ORANGE-TREE.

Kinds and Names. Of oranges we ſhall deſcribe five kinds or ſorts. Theſe apples were called by the ancients *mala aurea Heſperidum*, the golden apples of Heſperides; and therefore Hercules made it one of his labours to kill the dragon that kept the garden where they were, and to bring them away with him. The flowers of the orange-tree are called *napha*; and the ointment that is made of them *unguentum ex napha*. Oranges are now generally called *aurantia*.

Description. 1. The ordinary orange-tree, *mala aurantia vulgaris*, groweth often to a very great height and thickneſs, with large ſpreading arms and branches, with a rougher bark below, and green on the branches; yet is it ſmaller in leſs fruitful ſoils; ſparingly armed with ſharp but ſhort thorns; the leaves are ſomewhat ſimilar to thoſe of the lemon, but that each leaf hath a piece of a leaf ſet under it, are not dented at all about the edges, and are full of ſmall holes in them; the flowers are whitiſh, and of a ſtrong ſweet ſcent; the fruit hereof is round, with a thick bitter rind, of a deep yellowiſh-red colour, which from it taketh the name of an orange colour, having a ſoft, thin, white looſe ſubſtance next unto the outer coloured rind; and a ſour juice lying mixed amongſt ſmall ſkins in ſeveral parts, with ſeed between them in partitions; the juice of ſome is leſs ſour than others, and of a taſte between ſour and ſweet, nearly like wine.

2. The wild or crab orange-tree, *malus aurantia ſylveſtris.* This tree groweth wild as our crab-trees do, and is fuller of branches and thicker ſet with thorns than the former.

3. The apple orange, called in Latin *malus aurantia, cortice dulci eduli.* The Spaniards call this orange *naranja caxel.* This differeth from others not ſo much in the colour of the outer bark, which is of a deep gold yellowiſh-red, but in the whole fruit, which is throughout almoſt as firm as an apricot, and yet diſtinguiſhed into parts, in the inſide, like others; which, together with the bark and rind, is to be eaten like an apple; the rind not being rough and bitter as the others.

4. The orange without ſeeds, *malus aurantia, unico grano.* This only differeth from that orange which has the beſt ſour juice, in having but one grain or ſeed in the whole juice lying within it.

5. The dwarf orange-tree, *malus aurantia pumilio.* The ſtock of this dwarf-tree is low, and the branches grow thick, well ſtored with leaves, but they are ſmaller and narrower than the other; the flowers alſo are many, and thick ſet on the branches, which bear fruit more plentifully than the former, though of a ſmaller ſize, yet equally well-coloured.

Place and Time. All theſe ſort of oranges, as well as the lemons and citrons, are brought unto us from Spain and Portugal; they hold time with the lemons, having their leaves always green, with green bloſſoms and ripe fruit conſtantly together.

Government and Virtues. All theſe trees and fruits are governed by Jupiter. The fruit is of different parts and qualities; the rinds of the oranges are more bitter and hot than thoſe of the lemons or citrons, and are therefore preferable to warm a cold ſtomach, breaking the wind and cutting the phlegm therein; after the bitterneſs is taken from them, by ſteeping them in water for ſundry days, and then preſerved

ſerved either wet or dry, beſides their uſe in banquets, they are very effectual for ſtrengthening the heart and ſpirits. Though the juice is inferior to thoſe of the citron and lemon, and fitter for meat than medicine, yet four or five ounces of the juice taken at a time, in wine or ale, will drive forth putrid humours from the inward parts by ſweat, and ſtrengthen and comfort the heart. The diſtilled water of the flowers, beſides the odoriferous ſcent it hath as a perfume, is good againſt contagious diſeaſes and peſtilential fevers; by drinking thereof at ſundry times, it helpeth alſo the moiſt and cold infirmities of the womb; the ointment that is made of the flowers is good to anoint the ſtomach, to help the cough, and expectorate cold raw phlegm; and to warm and comfort the other parts of the body.

## PARSLEY.

THIS is ſo well known that it needs no deſcription.

Government and Virtues. It is under the dominion of Mercury, and is very comfortable to the ſtomach; it helpeth to provoke urine, women's courſes, and to break wind both in the ſtomach and bowels; it a little openeth the body, but the root poſſeſſeth this laſt virtue in a greater degree, opening obſtructions both of the liver and ſpleen; and is therefore accounted one of the five opening roots; Galen commendeth it againſt the falling ſickneſs, and ſays it mightily provokes urine, if boiled and eaten like parſnips. The ſeed is alſo effectual to provoke urine and women's courſes, expel wind, break the ſtone, and eaſe the pains and torments thereof, or of any other part of the body, occaſioned by wind. It is alſo effectual againſt the venom of any poiſonous creature, and the dangerous conſequences which ariſe from the taking of litharge, and is good againſt a cough. The diſtilled water of parſley is a familiar medicine with nurſes to give to children when they are troubled with wind in the ſtomach or belly, which they call the frets; it is alſo greatly uſeful to grown perſons. The leaves of parſley, when uſed with bread or meal, and laid to the eyes that are inflamed with heat, or ſwoln, doth greatly relieve them; and, being fried with butter, and applied to women's breaſts that are hard through the curdling of the milk, it quickly abateth the hardneſs; it alſo taketh away black and blue marks ariſing from bruiſes or falls. The juice, dropped into the ears with a little wine, eaſeth the pains thereof: Tragus recommends the following, as an excellent medicine to help the jaundice and falling ſickneſs, the dropſy, and ſtone in the kidneys, viz. Take of the ſeeds of parſley, fennel, aniſe, and carraways, of each an ounce; of the roots of parſley, burnet, ſaxifrage, and carraways, of each one ounce and an half; let the ſeeds be bruiſed, and the roots waſhed and cut ſmall;

let them lie all night in ſteep in a pottle of white wine, and in the morning be boiled in a cloſe earthen veſſel until a third part or more be waſted, which, being ſtrained and cleared, take four ounces thereof morning and evening, firſt and laſt, abſtaining from drink after it for three hours. This openeth obſtructions of the liver and ſpleen, and expelleth the dropſy and jaundice by urine.

## PARSLEY-PIERT, OR PARSLEY-BREAKSTONE.

Description. THE root, although it be ſmall and thready, yet it continues many years, from whence ariſe many leaves lying along upon the ground, each ſtanding upon a long ſmall footſtalk, the leaves as broad as a man's nail, very deeply indented on the edges, ſomewhat like a parſley leaf, but of a very duſky green colour. The ſtalks are very weak and ſlender, about three or four fingers in length, ſet ſo full of leaves that they can hardly be ſeen, either having no footſtalk at all, or but very ſhort. The flowers are ſo ſmall they can hardly be ſeen, and the ſeed is ſcarcely perceptible at all.

Place. It is common through all parts of the kingdom, and is generally to be met with in barren, ſandy, and moiſt, places. It may be found plentifully about Hampſtead-heath, in Hyde-park, and in other places near London.

Time. It may be found all the ſummer through, from the beginning of April to the end of October.

Government and Virtues. Its operation is very prevalent to provoke urine and to break the ſtone. It is a very good ſallad-herb, and would pickle for winter uſe as well as ſamphire. It is a very wholeſome herb. A dram of the powder of it, taken in white wine, brings away gravel from the kidneys inſenſibly, and without pain. It alſo helps the ſtranguary.

## PARSNIP.

THE garden kind thereof is ſo well known (the root being commonly eaten) that to particularize it is totally unneceſſary; but the wild kind being of more phyſical uſe, the following is its

Description. The wild parſnip differeth little from that of the garden, but does not grow ſo fair or large, nor has it ſo many leaves; the root is ſhorter, more woody, and not ſo fit to be eaten; therefore the more medicinable.

Place. The name of the firſt ſheweth the place of its growth.

The other groweth wild in divers places, as in the marſhes by Rocheſter, and elſewhere, and flowereth in July; the ſeed being ripe about the beginning of Auguſt the ſecond year after the ſowing; ſeldom flowering the firſt year.

Government and Virtues. The garden parſnip is under Venus. It is exceeding good and wholeſome nouriſhment, though rather windy; it is ſaid to provoke venery, notwithſtanding which it fatteneth the body much, if frequently uſed. It is alſo ſerviceable to the ſtomach and reins, and provoketh urine. But the wild parſnip hath a cutting, attenuating, cleanſing, and opening, quality therein. It reſiſteth and helpeth the bitings of ſerpents, eaſeth pains and ſtitches in the ſides, and diſſolveth wind both in the ſtomach and bowels; it alſo provoketh urine. The root is often uſed, but the ſeed much more.

The wild parſnip being preferable to that of the garden, ſhews nature to be the beſt phyſician.

## COW-PARSNIP.

Description. THIS groweth with three or four large, ſpread, winged, rough, leaves, lying often on the ground, or elſe raiſed a little from it, with long, round, hairy, footſtalks under them, parted uſually into five diviſions, the two couples ſtanding againſt each other, and one at the end, and each leaf being almoſt round, yet ſomewhat deeply cut in on the edges in ſome leaves, and not ſo deep in others, of a whitiſh green colour, ſmelling ſomewhat ſtrongly; among which ariſeth up a round creſted hairy ſtalk, two or three feet high, with a few joints and leaves thereon, and branched at the top, where ſtand large umbels of white, and ſometimes reddiſh, flowers, and, after them, flat, whitiſh, thin, winged ſeed, two always joined together. The root is long and white, with two or three long ſtrings growing down into the ground, ſmelling likewiſe ſtrong and unpleaſant.

Place. It groweth in moiſt meadows, the borders and corners of fields, and near ditches, generally throughout the kingdom.

Time. It flowereth in July, and ſeeds in Auguſt.

Government and Virtues. Mercury hath the dominion over them. The ſeed hereof, as Galen ſaith, is of a ſharp and cutting quality, and is therefore a fit medicine for the cough and ſhortneſs of breath, the falling ſickneſs, and the jaundice. The root is available to all the purpoſes aforeſaid, and is alſo of great uſe to take away the hard ſkin that groweth on a fiſtula, by ſcraping it upon the part. The ſeed hereof, being drunk, cleanſeth the belly from tough phlegmatic matter;

it eaſeth thoſe that are liver-grown, and paſſions of the mother, either being drunk or the ſmoke thereof inhaled by fumigation; it raiſeth ſuch as have fallen into a deep ſleep or lethargy, by burning it under their noſe. The ſeed and root, being boiled in oil, and the head rubbed therewith, helpeth not only thoſe labouring under a phrenzy, but alſo the lethargy or drowſy evil, and thoſe that have been long troubled, when mixed with rue. It alſo helpeth the running ſcab and the ſhingles. The juice of the flowers, dropped into the ears that run and are full of matter, cleanſeth and healeth them.

## The PEACH-TREE.

Description. THE peach-tree does not grow ſo large as the apricot-tree, yet it hath tolerably wide-ſpreading branches, from whence ſpring ſmaller reddiſh twigs, whereon are ſet long and narrow green leaves, dented about the edges. The bloſſoms are larger than the plumb, and of a light purple colour. The fruit is round, and ſometimes as big as a middle-ſized pippin; others are ſmaller, and differing in colour and taſte, as ruſſet, red, or yellow, watery, or firm, with a freize or cotton all over, a cleft therein like an apricot, and a rugged furrowed great ſtone within it, which contains a bitter kernel. It ſooner waxeth old and decayeth than the apricot-tree.

Place. They are nurſed up in gardens and orchards.

Time. They flower in the ſpring, and fructify in autumn.

Government and Virtues. Venus owns this tree, and by it oppoſeth the ill effects of Mars. Nothing is better to purge choler and the jaundice in children and young people, than the leaves of this tree made into a ſyrup or conſerve, of which two ſpoonfuls at a time may ſafely be taken. The leaves of peaches, bruiſed and laid on the belly, kill worms; and ſo they do alſo, if boiled in ale and drunk; they likewiſe open the belly; and, being dried, are a ſafe medicine to diſcuſs humours. The powder of them, ſtrewed upon freſh bleeding wounds, ſtayeth their bleeding, and cloſeth them up. The flowers, ſteeped all night in a little warm wine, ſtrained forth in the morning, and drunk faſting, do gently open the belly. A ſyrup made of them, as the ſyrup of roſes is made, operates more forcibly than that of roſes, as it provoketh vomiting, and diſcuſſeth watery and hydropic humours by the continuance thereof. The flowers made into a conſerve produce the ſame effect. The liquor, which drops from the tree on its being wounded, is given in the decoction of coltsfoot to thoſe that are troubled with the cough or ſhortneſs of breath; by adding thereto ſome ſweet wine, and putting alſo ſome ſaffron therein, it is good for thoſe that are hoarſe, or have loſt their voice; it helpeth all defects of the lungs, and thoſe that vomit or ſpit blood. Two drachms thereof given in the juice of lemons, or of raddiſhes, are good for thoſe that are troubled with the ſtone. The kernels of the ſtones do wonderfully eaſe the pains and wringings of the belly, occaſioned by wind or ſharp humours; and make an excellent medicine for the ſtone, when done up in the following manner: Take fifty kernels of peach-ſtones, and one hundred of the kernels of cherry-ſtones, a handful of elder-flowers, freſh or dried, and three pints of muſcadel; ſet them in a cloſe pot into a bed of horſe-dung for ten days; after which diſtil it in a glaſs, with a gentle fire, and keep it for uſe; three or four ounces of it may be drunk at a time. The milk or cream of theſe kernels being drawn forth with ſome vervain-water, and applied to the forehead and temples, procures reſt and ſleep to ſick perſons who cannot otherwiſe get it. By rubbing the temples with the oil drawn from the kernels, the ſame effect is produced. The ſaid oil, put into clyſters, or anointing the lower part of the belly, eaſeth the pain of the windy cholic, and, when dropped into the ears, relieveth pain, in them; the juice of the leaves hath the like virtue; and, by rubbing the forehead and temples, it helpeth the megrim and all other pains in the head. If the kernels be bruiſed and boiled in vinegar, until they become thick, and applied to the head, it cauſeth the hair to grow upon bald places, or where it is too thin.

## THE PEAR-TREES.

PEAR-TREES are ſo well known that they need no deſcription.

Government and Virtues. This tree belongs to Venus, as well as the apple-tree. For their phyſical uſe, they are beſt diſcerned by their taſte. All the ſweet or luſcious ſorts, whether manured or wild, tend to open the belly more or leſs; thoſe, on the contrary, that are ſour and harſh, have an aſtringent quality; the leaves of each poſſeſs the ſame contrariety of properties. Thoſe that are moiſt are, in ſome degree, of a cooling nature; but the harſh or wild ſorts are much more ſo, and are frequently uſed as repelling medicines; if the wild ſorts be boiled with muſhrooms, it maketh them the leſs dangerous. The ſaid pears, boiled with a little honey, help much the oppreſſion of the ſtomach, as indeed all ſorts of them do more or leſs; but the harſher kinds are moſt cooling and binding. They are very uſeful to bind up green wounds, ſtopping the blood and healing the wound without further trouble or inflammation, as Galen ſaith he hath found by experience.

Wild pears ſooner cloſe up the lips of the green wounds than the others.

Schola Salerni adviſeth to drink much wine after eating of pears, otherwiſe (it is ſaid) they are as bad as poiſon; but, if a poor man find his ſtomach oppreſſed by eating pears, it is but working hard, which will have the ſame effect as drinking wine.

## PELLITORY OF SPAIN.

COMMON pellitory of Spain, if planted in gardens, thrives very well in this kingdom. There is a ſort, growing wild in this country, which is very little, if at all, inferior to the other.

Description. Pellitory is a very common plant, yet muſt be diligently looked after to be brought to perfection. The root goes downright into the ground, bearing leaves long and finely cut upon the ſtalks, lying upon the ground, much larger than the leaves of camomile are; at the top it bears one ſingle large flower at a place, having a border of many leaves, white on the upper ſide, and reddiſh underneath. with a yellow thrum in the middle, not ſtanding ſo cloſe as that of camomile.

The other common pellitory, which groweth here ſpontaneouſly, hath a root of a ſharp biting taſte, ſcarcely diſcernible by the taſte from that before deſcribed, from whence ariſe divers brittle ſtalks, more than a yard high, with narrow long leaves, finely dented about the edges, ſtanding one above another up to the top. The flowers are many and white, ſtanding in tufts like thoſe of yarrow, with a ſmall yellowiſh thrum in the middle. The ſeed is very ſmall.

Place. The laſt groweth in fields, by the hedge-ſides, and paths, almoſt every where in Britain.

Time. It flowereth at the end of June, and in July.

Government and Virtues. It is under the government of Mercury, and is one of the beſt purgers of the brain that grows. An ounce of the juice taken in a draught of muſcadel, an hour before the fit of the ague comes, will aſſuredly drive away the ague, at the ſecond or third time of taking it at furtheſt. Either the herb or root dried and chewed in the mouth, purgeth the brain of phlegmatic humours, thereby not only eaſing pains in the head and teeth, but alſo hindering the diſtilling of the brain upon the lungs and eyes, thereby preventing coughs, phthiſics, and conſumptions, the apoplexy, and falling ſickneſs. It is an excellent approved remedy in the lethargy. The powder of the herb or root, being ſnuffed up the noſtrils, procureth ſneezing, and eaſeth the head-ach. Being made into an ointment with hog's-lard, it takes away black and blue ſpots occaſioned by blows or falls, and helps both the gout and ſciatica.

PEL-

## PELLITORY OF THE WALL.

Description. It riſeth up with many browniſh, red, tender, weak, clear, and almoſt tranſparent, ſtalks, about two feet high, upon which grow at the ſeveral joints two leaves ſomewhat broad and long, of a dark green colour, which afterwards turn browniſh, ſmooth on the edges, but rough and hairy, as the ſtalks are alſo. At the joints with the leaves, from the middle of the ſtalk upwards, where it ſpreadeth into ſome branches, ſtand many ſmall, pale, purpliſh, flowers, in hairy rough heads or huſks, after which comes ſmall, black, and rough, ſeed, which ſticks to any cloth or garment it may chance to touch. The root is ſomewhat long, with many ſmall fibres thereat, of a dark reddiſh colour, which abideth the winter, although the ſtalks and leaves periſh, and ſpring freſh every year.

Place. It generally groweth wild, in moſt parts of the kingdom, about the borders of fields, by the ſides of walls, and among rubbiſh. It proſpereth well when brought up in gardens, and, if once planted on the ſhady ſide, it will afterwards ſpring up of its own ſowing.

Time. It flowereth in June and July, and the ſeed is ripe ſoon after.

Government and Virtues. It is under the dominion of Mercury. The dried herb pellitory made up into an electuary with honey, or the juice of the herb, or the decoction thereof made up with ſugar or honey, is a ſingular remedy for an old or dry cough, ſhortneſs of breath, and wheeſing in the throat. Three ounces of the juice thereof, taken at a time, greatly help the ſtoppage of urine, and expel the ſtone or gravel in the kidneys or bladder, and are therefore uſually put among other herbs uſed in clyſters to mitigate pains in the back, ſides, or bowels, proceeding from wind, ſtoppage of urine, the gravel, or ſtone, as aforeſaid. If the bruiſed herb, ſprinkled with ſome muſcadine, be warmed upon a tile, or in a diſh, upon a few quick coals in a chafing-diſh, and applied to the belly, it hath the ſame effect. The decoction of the herb, being drunk, eaſeth pains of the mother, and forwards the menſes; it alſo eaſeth ſuch complaints as ariſe from obſtructions of the liver, ſpleen, and reins. The ſame decoction, with a little honey added thereto, is good to gargle a ſore throat. The juice, if held a while in the mouth, eaſeth pains in the teeth. The diſtilled water of the herb, drunk with ſome ſugar, produceth the ſame effect; it alſo cleanſeth the ſkin from ſpots, freckles, purples, wheals, ſunburn, morphew, &c. The juice, dropped into the ears, eaſeth the noiſe thereof, and taketh away the pricking and ſhooting pains therein. The ſame, or the diſtilled water, aſſuageth hot and ſwelling impoſthumes, burnings and ſcalding by fire or water; alſo hot tumours and inflammations, or breakings out, &c. The ſaid juice made into a liniment, with ceruſe and oil of roſes, and anointed therewith, cleanſeth rotten ulcers, and ſtops the running ſores in children's heads, and prevents the hair from coming off; it is likewiſe of great ſervice to perſons afflicted with the piles, as it immediately eaſeth their pain, and, being mixed with goat's tallow, relieveth the gout. The juice, or herb itſelf, bruiſed with a little ſalt, is very effectual to cleanſe fiſtulas, and to heal them up ſafely: it is alſo of great benefit to any green wound. A poultice made hereof with mallows, and boiled in wine, mixed with wheat, bran, bean-flowers, and ſome oil, being applied warm to any bruiſed ſinew, tendon, or muſcle, doth, in a very ſhort time, reſtore it to its original ſtrength.

The juice of pellitory of the wall, clarified and boiled into a ſyrup with honey, and a ſpoonful of it drunk every morning, is very good for the dropſy.

## PENNY-ROYAL.

Description. THE common penny-royal is ſo well-known, that it needeth no deſcription.

There is another kind of penny-royal, ſuperior to the above, which differeth only in the largeneſs of the leaves and ſtalks; in riſing higher, and drooping upon the ground ſo much; the flowers of which are purple, growing in rundles about the ſtalk like the other.

Place. The firſt, which is common in gardens, groweth alſo in many moiſt and watery places in this kingdom. The ſecond is found wild in Eſſex, and divers places on the road from London to Colcheſter, and places adjacent.

Time. They flower in the latter end of ſummer.

Government and Virtues. This herb is under Venus. Dioſcorides ſaith, That penny-royal maketh tough phlegm thin, warmeth the coldneſs of any part that it is applied to, and digeſteth raw or corrupt matter: being boiled and drunk, it removeth the courſes, and expelleth the dead child and after-birth; being mixed with honey and ſalt, it voideth phlegm out of the lungs. Drunk with wine, it is of ſingular ſervice to thoſe who are ſtung or bit by any venomous beaſt; applied to the noſtrils, with vinegar, it is very reviving to perſons fainting and ſwooning; being dried and burnt, it ſtrengtheneth the gums, and is helpful to thoſe that are troubled with the gout; being applied as a plaſter, it taketh away carbuncles and blotches from the face; applied with ſalt, it helpeth thoſe that are ſplenetic, or liver-grown. The decoction doth help the itch, if waſhed therewith; being put into baths for women to ſit therein, it helpeth the ſwelling and hardneſs of the mother. The green herb bruiſed, and put into vinegar, cleanſeth foul ulcers, and taketh away the marks of bruiſes and blows about the eyes, and all diſcolouring of the face by fire, and the leproſy, being drunk and outwardly applied; boiled in wine, with honey and ſalt, it helpeth the tooth-ach. It helpeth the cold griefs of the joints, taking away the pains, and warming the cold parts, being faſt bound to the place after bathing or ſweating. Pliny addeth, that penny-royal and mint together help faintings or ſwoonings, infuſed in vinegar, and put to the noſtrils, or a little thereof put into the mouth. It eaſeth the head-ach, and the pains of the breaſt and belly, ſtayeth the gnawing of the ſtomach, and inward pains of the bowels; being drunk in wine, it provoketh the courſes, and expelleth the dead child and afterbirth; it helpeth the falling-ſickneſs: put into unwholeſome or ſtinking water that men muſt drink, as at ſea, and where other cannot be had, it maketh it leſs hurtful. It helpeth cramps or convulſions of the ſinews, being applied with honey, ſalt, and vinegar. It is very effectual for a cough, being boiled in milk and drunk, and for ulcers and ſores in the mouth. Mathiolus ſaith, the decoction thereof, being drunk, helpeth the jaundice, and all pains of the head and ſinews that come of a cold cauſe; and that it helpeth to clear and quicken the eye-ſight. Applied to the noſtrils of thoſe that have the falling-ſickneſs, or the lethargy, or put into the mouth, it helpeth them much, being bruiſed in vinegar, and applied. Mixed with barley meal, it helpeth burnings, and, put into the ears, eaſeth the pains of them.

## PEONY, MALE and FEMALE.

Description. THE male peony riſeth up with many browniſh ſtalks, whereon grow a great number of fair green, and ſometimes reddiſh, leaves, each of which is ſet againſt another upon a ſtalk without any particular diviſion in the leaf. The flowers ſtand at the tops of the ſtalks, conſiſting of five or ſix broad leaves, of a fair purpliſh red colour, with many yellow threads in the middle, ſtanding about the head, which after riſeth to be the ſeed-veſſels, divided into two, three, or four, rough crooked pods like horns, which, being full ripe, open and turn themſelves down one edge to another backward, ſhewing within them divers round, black, ſhining, ſeed, having alſo many red or crimſon grains intermixed with black, whereby it maketh a very pretty ſhow. The roots are thick and long, ſpreading and running down deep into the ground.

The ordinary female peony hath many ſtalks, and more leaves than the male; the leaves not ſo large, but nicked on the edges, ſome with great and deep, others with ſmaller, cuts and diviſions, of a dark or dead green colour. The flowers are of a ſtrong heady ſcent, moſt uſually ſmaller, and of a more purple colour, than the male, with yellow thrums about the head as the male hath. The ſeed-veſſels are like horns, as in the male, but ſmaller; the ſeed is black, but leſs ſhining. The roots conſiſt of many thick and ſhort tuberous clogs, faſtened at the ends of long ſtrings, and all from the head of the root, which is thick and ſhort, and of the like ſcent with the male.

Place and Time. They grow in gardens, and flower uſually about May.

Government and Virtues. It is an herb of the ſun, and under the lion. Phyſicians ſay, male peony roots are beſt; but male peony is beſt for men, and female peony for women. The roots are held to be of moſt virtue; then the ſeeds; next the flowers; and, laſt of all, the leaves. The root of the male peony, freſh gathered, hath been found by experience to cure the falling-ſickneſs; but the ſureſt way is (beſides hanging it about the neck, by which children have been cured) to take the root of the male peony waſhed clean and ſtamped ſomewhat ſmall, and infuſe it in ſack for twenty-four hours at leaſt; afterwards ſtrain it, and take, morning and evening, a good draught for ſundry days together before and after a full moon; and this will alſo cure older perſons, if the diſeaſe be not grown too old and paſt cure, eſpecially if there be a due and orderly preparation of the body, with poſſet-drink made of betony, &c. The root is alſo effectual for women that are not ſufficiently cleanſed after childbirth, and ſuch as are troubled with the mother; for which likewiſe the black ſeed, beaten to powder and given in wine, is alſo available. The black ſeed alſo, taken before bed-time and in the morning, is very effectual for ſuch as in their ſleep are troubled with the diſeaſe called ephialtes or incubus, but we commonly call it the night-mare, a diſeaſe which melancholy perſons are ſubject unto: it is alſo good againſt melancholy dreams. The diſtilled water, or ſyrup made of the flowers, worketh the ſame effects that the root and the ſeed do, although more weakly. The female is often uſed for the purpoſes aforeſaid, by reaſon the male is ſo ſcarce.

## PEPPER-WORT, OR DITTANDER.

Description. THE common pepper-wort ſendeth forth ſomewhat long and broad leaves, of a light bluiſh-green colour, finely dented about the edges, and pointed at the ends, ſtanding upon round hard ſtalks, three or four feet high, ſpreading many branches on all ſides, and having many ſmall white flowers at the tops of them, after which follow ſmall ſeed in ſmall heads. The root is ſlender, running much under ground, and ſhooting up again in many places; and both leaves and roots are very hot and ſharp of taſte, like pepper, for which cauſe it took the name.

Place. It groweth naturally in many parts of the kingdom, as at Clare in Eſſex; alſo near unto Exeter, Devonſhire; upon Rocheſter Common, Kent; Lancaſhire, and divers other places; but is uſually kept in gardens.

Time. It flowereth in the end of June, and in July.

Government and Virtues. This herb is under the direction of Mars. Pliny and Paulus Æginetus ſay, that pepper-wort is very effectual for the ſciatica, or any other gout, pain in the joints, or any other inveterate grief; the leaves to be bruiſed and mixed with old hogs-lard, and applied to the place, and to continue thereon four hours in men, and two hours in women, the place being afterwards bathed with wine and oil mixed together, and then wrapped with wool or ſkins after they have ſweat a little; it alſo amendeth the deformities or diſcolourings of the ſkin, and helpeth to take away marks, ſcars, and ſcabs, or the foul marks of burning with fire or iron. The juice hereof is in ſome places uſed to be given in ale to women with child, to procure them a ſpeedy delivery.

## PERWINKLE.

Description. THE common ſort hath many branches running upon the ground, ſhooting out ſmall fibres at the joints as it runneth, taking thereby hold in the ground, and rooteth in divers places; at the joints of theſe branches ſtand two ſmall dark-green ſhining leaves, ſomewhat like bay leaves, but ſmaller, and with them come forth alſo flowers, one at a joint ſtanding upon a tender footſtalk, being ſomewhat long and hollow, parted at the brims ſometimes into four, ſometimes into five, leaves; the moſt ordinary ſort are of a pale blue colour, ſome are pure white, and ſome of a dark reddiſh purple colour. The root is little bigger than a ruſh, buſhing in the ground, and creeping with its branches, and is moſt uſually planted under hedges, where it may have room to grow.

Place. Thoſe with the pale blue and thoſe with the white flowers grow in woods and orchards by the hedge-ſides in divers places of this land; but thoſe with the purple flowers in gardens only.

Time. They flower in March and April.

Government and Virtues. Venus owns this herb, and ſaith, that the leaves, eaten by man and wife together, cauſe love between them. The perwinkle is a great binder, ſtaying bleeding both at mouth and noſe, if ſome of the leaves be chewed; the French uſe it to ſtay women's courſes. Dioſcorides, Galen, and Ægineta, commend it againſt the laſk, and fluxes of the belly, to be drunk in wine.

## ST. PETER'S WORT.

DESCRIPTION. IT riſeth up with ſquare upright ſtalks for the moſt part, ſomewhat greater and higher than St. John's wort, but brown in the ſame manner, having two leaves at every joint, ſomewhat like, but larger than, St. John's wort; and a little rounder pointed, with few or no holes to be ſeen therein, and having ſometimes ſome ſmaller leaves riſing from the boſom of the greater, and ſometimes a little hairy alſo. At the tops of the ſtalks ſtand many ſtar-like flowers, with yellow threads in the middle, very like thoſe of St. John's wort, inſomuch that this is hardly to be diſcerned from it, but only by the largeneſs and height, the ſeed being alike in both. The root abideth long, ſending forth new ſhoots every year.

PLACE. It groweth in many groves and ſmall low woods, in divers places of this land, as in Kent, Huntingdonſhire, Cambridgeſhire, and Northamptonſhire; as alſo near water-courſes in other places.

TIME. It flowereth in June and July, and the ſeed is ripe in Auguſt.

GOVERNMENT AND VIRTUES. It is of the ſame property with St. John's wort, but ſomewhat weak, and therefore more ſeldom uſed. Two drachms of the ſeed taken at a time, in honeyed water, purge choleric humours, as ſaith Dioſcorides, Pliny, and Galen, and thereby help thoſe that are troubled with the ſciataca. The leaves are uſed, as St. John's wort, to help thoſe places of the body that have been burnt with fire.

## PIMPERNEL.

DESCRIPTION. COMMON pimpernel hath many weak ſquare ſtalks lying on the ground, beſet all along with two ſmall and almoſt round leaves at every joint one againſt another, very like chickweed; but hath no footſtalks, for the leaves as it were compaſs the ſtalk: the flowers ſtand ſingly, conſiſting of five round ſmall pointed leaves of a fine pale red colour, with ſo many threads in the middle, in whoſe places ſucceed ſmooth round heads, wherein is contained ſmall ſeed. The root is ſmall and fibrous, periſhing every year.

PLACE. It groweth every where almoſt, as well in the meadows and corn-fields as by the way-ſides, and in gardens, ariſing of itſelf.

TIME. It flowereth from May to Auguſt, and the ſeed ripeneth in the mean time and falleth.

GOVERNMENT AND VIRTUES. It is a ſolar herb. This is of a cleanſing and attractive quality, whereby it draweth forth thorns or ſplinters, or other ſuch-like things, from the fleſh, and, put up into the noſtrils, purgeth the head; and Galen ſaith alſo, they have a drying faculty, whereby they are good to cloſe the lips of wounds, and to cleanſe foul ulcers. The diſtilled water or juice is much eſteemed by the French to cleanſe the ſkin from any roughneſs, deformity, or diſcolouring, thereof: being boiled in wine, and given to drink, it is a good remedy againſt the plague and other peſtilential fevers, if the party, after taking it, lie warm in bed and ſweat for two hours after, and uſe the ſame twice at leaſt. It helpeth alſo all ſtingings and bitings of venomous beaſts or mad dogs, being uſed inwardly, and applied outwardly; it alſo openeth the obſtructions of the liver, and is very available againſt the infirmities of the reins; it provoketh urine, and helpeth to expel the ſtone and gravel out of the kidneys and bladder, and helpeth much in all inward wounds and ulcers. The decoction or diſtilled water is no leſs effectual to be applied to all wounds that are freſh and green, or old filthy fretting and running ulcers, which it very effectually cureth in a ſhort ſpace. A little honey mixed with the juice, and dropped into the eyes, cleanſeth them from cloudy miſts, or thick films which grow over them and hinder the ſight. It helpeth the tooth-ach, being dropped into the ear on the contrary ſide of the pain. It is alſo effectual to eaſe the pains of the hemorrhoids or piles.

## GROUND-PINE.

DESCRIPTION. THE common ground-pine groweth low, ſeldom above a hand's-breadth high, ſhooting forth divers ſmall branches, ſet with ſlender ſmall long narrow greyiſh or whitiſh leaves, ſomewhat hairy, and divided into three parts, many times buſhing together at a joint, and ſometimes ſome growing ſcatteredly upon the ſtalks, ſmelling ſomewhat ſtrong like unto roſin; the flowers are ſomewhat ſmall and of a pale yellow colour, growing from the joints of the ſtalks all along among the leaves, after which come ſmall and round huſks: the root is ſmall and woody, periſhing every year.

PLACE. It groweth more plentifully in Kent than in any other county of this land; as alſo in many places from on this ſide of Dartford, along to Rocheſter, and upon Chatham down.

TIME. It flowereth and giveth ſeed in the ſummer months.

Government and Virtues. Mars owns this herb. The decoction of ground-pine, drunk, doth wonderfully prevail againſt the ſtrangaary, or any inward pains ariſing from the diſeaſes of the reins and urine, and is good for all obſtructions of the liver and ſpleen, and gently openeth the body, for which purpoſe they were wont in former times to make pills with the powder thereof and the purple figs. It helpeth the diſeaſes of the mother, uſed inwardly or applied outwardly, procuring the courſes, and expelling the dead child and after-birth. It acts ſo powerfully, that it is utterly forbidden for women with child, in that it will cauſe abortion, or delivery before the time: it is effectual alſo in all pains and diſeaſes of the joints, as gouts, cramps, palſies, ſciataca, and achs; either the decoction of the herb in wine taken inwardly or applied outwardly, or both, for ſome time together; for which purpoſe the pills, made with the powder of ground-pine, and of hermodactils, with Venice turpentine, are very effectual. Theſe pills alſo are good for the dropſy, to be continued for ſome time. The ſame is a good help for the jaundice, and for griping pains in the joints, belly, or inward parts; it helpeth alſo all diſeaſes of the brain, proceeding of cold and phlegmatic humours and diſtillations, as alſo the falling-ſickneſs. It is an eſpecial remedy for the poiſon of the aconites of all ſorts, and other poiſonous herbs, as alſo againſt the ſtinging of any venomous creature. It is a good remedy for a cold cough, eſpecially in the beginning. For all the purpoſes aforeſaid, the herb, being tunned up in new drink and drunk, is almoſt as effectual, but far more acceptable to weak and dainty ſtomachs. The diſtilled water of the herb hath the ſame effects, but in a ſmaller degree. The conſerve of the flowers doth the like, which Mathiolus much commendeth againſt the palſy. The green herb, or the decoction thereof, being applied, diſſolveth the hardneſs of women's breaſts, and all other hard ſwellings in any other part of the body. The green herb alſo, applied, or the juice thereof with ſome honey, not only cleanſeth putrid, ſtinking, foul, and malignant, ulcers and ſores of all ſorts, but healeth up the lips of green wounds in any part alſo.

## PLANTAIN.

THIS groweth ſo familiarly in meadows and fields, and by pathways, and is ſo well known, that it needeth no deſcription.

Time. It is in its beauty about June, and the ſeed ripeneth ſhortly after.

Government and Virtues. It is under the command of Venus, and cures the head by antipathy to Mars, and the privities by ſympathy to Venus; neither is there hardly a martial diſeaſe but it cures. The juice of plaintain, clarified and drunk for divers days together, either by itſelf or in other drink, prevaileth wonderfully againſt all torments or excoriations in the bowels, helpeth the diſtillations of rheum from the head, and ſtayeth all manner of fluxes, even women's courſes when they flow too abundantly. It is good to ſtay ſpitting of blood, and other bleeding at the mouth, or the making of foul or bloody water by reaſon of any ulcer in the reins or bladder; and alſo ſtayeth the too free bleeding of wounds. It is held an eſpecial remedy for thoſe that are troubled with the phthyſic, or conſumption of the lungs, or ulcers in the lungs, or coughs that come of heat. The decoction or powder of the roots or ſeed is much more binding for all the purpoſes aforeſaid than the leaves. Dioſcorides ſaith, that the root boiled in wine helpeth the tertian and quartan ague. The herb, but eſpecially the ſeed, is held to be profitable againſt the dropſy, the falling-ſickneſs, the yellow jaundice, and ſtoppings of the liver and reins. The roots of plantain and pellitory of Spain beaten to powder, and put into hollow teeth, take away the pains of them: the clarified juice or diſtilled water dropped into the eyes cooleth the inflammations in them, and taketh away the pin and web; and, dropped into the ears, eaſeth pains in them, and helpeth and reſtoreth the hearing: the ſame alſo, with juice of houſeleek, is profitable againſt all inflammations and breakings out of the ſkin, and againſt burnings and ſcaldings by fire or water. The juice or decoction made either of itſelf or other things of like nature is of much uſe and good effect for old and hollow ulcers that are hard to be cured, and for cancers and ſores in the mouth or privy parts; and helpeth alſo the piles. The juice mixed with oil of roſes, and the temples and forehead anoited therewith, eaſeth the pains of the head proceeding from heat, and helpeth lunatic and phrenetic perſons very much: as alſo the biting of ſerpents or a mad dog; the ſame alſo is profitably applied to all hot gouts in the feet or hands, eſpecially in the beginning. It is alſo good to be applied where any bone is out of joint, to hinder inflammation, ſwellings, and pains, that preſently riſe thereupon. The powder of the dried leaves, taken in drink, killeth worms of the belly, and, boiled in wine, killeth worms that breed in old and foul ulcers. One part of plantain water, and two parts of the brine of powdered beef, boiled together and clarified, is a moſt ſure remedy to heal all ſpreading ſcabs and itch in the head or body, all manner of tetters, ringworms, the ſhingles, and all other running and fretting ſores. Briefly, the plantains are ſingular good wound-herbs, to heal freſh or old wounds or ſores, either inward or outward.

## PLUMBS.

THESE are ſo well known that they need no deſcription.

Government and Virtues. All plumbs are under Venus: thoſe that are ſweet moiſten the ſtomach, and make the belly ſoluble; thoſe that are ſour quench thirſt more, and bind the belly; the moiſt and wateriſh ſooner corrupt in the ſtomach than the firm, which are more nouriſhing and leſs offenſive. The dried fruit, ſold by the grocers under the name of damaſk prunes, do ſomewhat looſen the belly, and, being ſtewed, are often uſed, both in health and ſickneſs, to procure appetite, and gently open the belly, allay choler, and cool the ſtomach. The juice of plumb-tree leaves, boiled in wine, is good to waſh and gargle the mouth and throat, to dry the flux of rheum coming to the palate, gums, or almonds of the ears. The gum of the tree is good to break the ſtone. The gum, or leaves, boiled in vinegar, and applied, will kill tetters and ringworms. Mathiolus ſaith, the oil preſſed out of the ſtones, as oil of almonds is made, is good againſt the inflamed piles, the tumours or ſwellings of ulcers, hoarſeneſs of the voice, roughneſs of the tongue and throat, and likewiſe pains in the ears. Five ounces of the ſaid oil, taken with one ounce of muſcadine, will expel the ſtone, and help the cholic.

## POLYPODY OF THE OAK.

Description. This is a ſmall herb, conſiſting of nothing but roots and leaves, bearing neither ſtalk, flower, nor ſeed, as it is thought. It has three or four leaves riſing from the root, every one ſingly by itſelf, of about a hand's-length, which are winged, conſiſting of many ſmall narrow leaves, cut into the middle rib, ſtanding on each ſide of the ſtalk, large below, and ſmaller up to the top, not dented or notched on the edges at all like the male fern; of a ſad green colour, and ſmooth on the upper ſide, but on the under ſide ſomewhat rough, by reaſon of ſome yellowiſh ſpots thereon. The root is ſmaller than one's little finger, lying ſloping, or creeping along under the upper cruſt of the earth, browniſh on the outſide, greeniſh within, of a ſweet harſhneſs in taſte, ſet with certain rough knobs on each ſide thereof, having alſo much moſs or yellow hair upon it, and ſome fibres underneath, whereby it is nouriſhed.

Place. It groweth as well upon old rotten ſtumps or trunks of trees, as oak, beech, hazel, willow, or any other, as in the woods under them, and upon old mud walls; alſo in moſſy, ſtony, and gravelly, places, near unto the woods. That which grows upon oak is accounted the beſt, but the quantity thereof is ſcarcely ſufficient for common uſe.

Time. Being always green, it may be gathered for uſe at any time.

Government and Virtues. It is an herb of Saturn. Polypodium of the oak is deareſt; but that which grows upon the ground is beſt to purge melancholy; if the humour proceed from other cauſes, chuſe your polypodium accordingly. Meſue ſaith, that it drieth up thin humours, digeſteth thick and tough, and purgeth burnt choler, and eſpecially thick and tough phlegm, and thin phlegm alſo, even from the joints; and is therefore good for thoſe that are troubled with melancholy, or quartan agues, eſpecially if it be taken in whey or honeyed water, in barley-water, or the broth of a chicken, with epythimum, or with beets and mallows. It is alſo good for the hardneſs of the ſpleen, and for prickings or ſtitches in the ſides, as alſo for the cholic; ſome chuſe to put to it ſome fennel, anniſeed, or ginger, to correct the lothing it cauſeth in the ſtomach, which is not at all neceſſary, it being a ſafe and gentle medicine, fit for all perſons at all ſeaſons, which daily experience confirmeth; and an ounce of it may be given at a time in a decoction, if there be not ſena or ſome other ſtrong purger mixed with it. A drachm or two of the powder of the dried roots, taken faſting in a cup of honeyed water, worketh gently, and for the purpoſes aforeſaid. The diſtilled water, both from the roots and leaves, is much commended for the quartan ague, if taken for ſeveral days together; as alſo againſt melancholy, or fearful or troubleſome ſleeps or dreams; and with ſome ſugar-candy diſſolved therein, is good againſt the cough, ſhortneſs of breath, and wheeſings, and thoſe diſtillations of thin rheum upon the lungs which cauſe phthyſics, and oftentimes conſumptions. The freſh roots beaten ſmall, or the powder of the dried roots mixed with honey, and applied to any of the limbs out of joint, doth much help them. Applied to the noſe, it cureth the diſeaſe called polypus, which is a piece of fungous fleſh growing therein, which in time ſtoppeth the paſſage of breath through that noſtril; and it helpeth thoſe clefts or chops that come between the fingers or toes.

## POPLAR-TREE.

Description. THERE are two ſorts of poplars which are very familiar with us, viz. the white and the black: the white ſort groweth large, and tolerably high, covered with a ſmooth, thick, white, bark, eſpecially the branches, having large leaves cut into ſeveral diviſions, almoſt like a vine leaf, but not of ſo deep a green on the upper ſide, and hoary white underneath, of a good ſcent, the whole repreſenting the form of colt's-foot. The catkins, which it bringeth forth before the leaves, are long, of a faint reddiſh colour, which fall away, and but ſeldom bear good ſeed with them. The wood hereof is ſmooth, ſoft, and white, very finely waved, whereby it is much eſteemed.

The black poplar groweth higher and ſtraiter than the white, with a greyiſh bark, bearing broad and green leaves ſomewhat like ivy leaves, not cut in on the edges like the white, but whole and dented, ending in a point, and not white underneath, hanging by ſlender long foot-ſtalks, which, with the air, are continually ſhaken as the aſpen leaves are. The catkins hereof are greater than of the white, compoſed of many round green berries, as it were ſet together in a long cluſter, containing much downy matter, which, on being ripe, is blown away with the wind. The clammy buds hereof, before they are ſpread into leaves, are gathered to make the *unguentum populeon*, and are of a yellowiſh green colour, and ſmall, ſomewhat ſweet, but ſtrong. The wood is ſmooth, tough, and white, and eaſy to be cloven. On both theſe trees groweth a ſweet kind of muſk, which formerly uſed to be put into ſweet ointments.

Place. They grow in moiſt woods, and by the water-ſide, in all parts of the kingdom; but the white ſort is not ſo frequently to be met with as the other.

Time. They are in leaf at the end of ſummer, but the catkins come before the leaves as above-mentioned.

Government and Virtues. Saturn hath dominion over both. The white poplar, ſaith Galen, poſſeſſes a cleanſing property; one ounce in powder of the bark thereof being drunk, ſaith Dioſcorides, is a remedy for thoſe that are troubled with the ſciatica, or the ſtranguary. The juice of the leaves, dropped warm into the ears, eaſeth the pains thereof. The young clammy buds or eyes, before they break out into leaves, bruiſed, and a little honey put to them, are a good medicine for a dull ſight. The black poplar is held to be more cooling than the white, and therefore the leaves bruiſed with vinegar, and applied, help the gout. The ſeed, drunk in vinegar, is held good againſt the falling ſickneſs. The water, that droppeth from the hollow places of this tree, taketh away warts, puſhes, wheals, and other out-breakings in the body. The young black poplar buds, ſaith Mathiolus, are much uſed by women to beautify their hair, bruiſing them with freſh butter, and ſtraining them after they have been kept for ſome time in the ſun. The ointment called populeon, which is made of this poplar, is ſingularly good for all heat and inflammation in any part of the body, and tempereth the heat of wounds. It is much uſed to dry up the milk in women's breaſts, when they have weaned their children.

## POPPY.

OF theſe there are three kinds. viz. the white and black of the garden, and the erratic wild poppy, or corn-roſe.

Description. The white poppy hath at firſt four or five whitiſh green leaves lying upon the ground, which riſe with the ſtalk, compaſſing it at the bottom of them, and are very large, much cut or torn in on the edges, and dented alſo. The ſtalk, which is uſually four or five feet high, hath ſometimes no branches at the top, and uſually but two or three at moſt, bearing but one head, each wrapped in a thin ſkin, which boweth down before it be ready to blow, and then, riſing and being broken, the flower within it ſpreadeth itſelf open, and conſiſteth of four very large round white leaves, with many whitiſh round threads in the middle, ſet about a ſmall round green head, having a crown, or ſtar-like cover at the head thereof, which, growing ripe, becometh as large as a great apple, wherein are contained a great number of ſmall round ſeed, in ſeveral partitions or diviſions next unto the ſhell, the middle thereof remaining hollow and empty. All the whole plant, leaves, ſtalks, and heads, while they are freſh, young, and green, yield a milk, when they are broken, of an unpleaſant bitter taſte, almoſt ready to provoke puking, and of a ſtrong heady ſmell, which, being condenſed, is called opium. The root is white and woody, periſhing as ſoon as it hath given ripe ſeed.

The black poppy differeth but little from the former, until it beareth its flower, which is ſomewhat leſs, and of a black purpliſh colour, but without any purple ſpots in the bottom of the leaf. The head of the ſeed is much leſs than the former, and openeth itſelf a little round about the top, under the crown, ſo that the ſeed, which is very black, will fall out, if the head is turned downwards.

The wild poppy, or corn-roſe, hath long and narrow leaves, very much cut in on the edges into many diviſions, of a light green colour, and ſometimes hairy withal. The ſtalk is blackiſh and hairy alſo, but not ſo tall as the garden kinds, having ſome ſuch like leaves thereon as grow below, parted into three or four branches ſometimes, whereon grow ſmall hairy heads, bowing down before the ſkin breaks wherein the flower is incloſed, which, when it is full blown, is of a fair yellowiſh red or crimſon colour, and in ſome much paler, without any ſpot in the bottom of the leaves, having many black ſoft ſpots in the middle, compaſſing a ſmall green head, which, when it is ripe, is no larger than one's little finger end, wherein is contained much black ſeed, ſmaller by half than that of the garden. The root periſheth every year, and ſpringeth again of its own ſowing. Of this kind there is one ſmaller in all the parts thereof, but differing in nothing elſe.

Place. The garden kinds do not naturally grow wild in any place, but are all ſown in gardens, where they grow. The wild poppy or corn-roſe is plentiful enough, and many times too much ſo, in the corn fields in all parts of the kingdom, as alſo upon the banks of ditches and by hedge-ſides. The ſmaller wild kind is alſo to be met with in thoſe places, though not ſo plentifully as the former, Time. The garden kinds are uſually ſown in the ſpring, which then flower about the end of May, and ſomewhat earlier, if they are of their own ſowing. The wild kinds uſually flower from May until July, and the ſeed of them is ripe ſoon after their flowering.

Government and Virtues. The herb is lunar, and the juice of it is made into opium. The garden poppy heads, with the ſeed, made into a ſyrup, are frequently and to good effect uſed to procure reſt and ſleep to the ſick and weak, and to ſtay catarrhs and defluxions or hot thin rheums from the head into the ſtomach, and upon the lungs, cauſing a continual cough, the fore-runner of a conſumption; it helpeth alſo hoarſeneſs of the throat, and when a perſon hath loſt the power of articulation; for all which complaints the oil of the ſeed is alſo a good remedy. The black ſeed, boiled in wine and drunk, is alſo ſaid to ſtay the flux of the belly, and the menſes. The empty ſhells of the poppy heads are uſually boiled in water, and given to procure ſleep; the leaves likewiſe, when ſo boiled, poſſeſs the ſame virtue. If the head and temples be bathed with the decoction warm, the oil of poppies, the green leaves or heads bruiſed and applied with a little vinegar, or made into a poultice with barley-meal, or hog's greaſe, it cooleth and tempereth all inflammations, as alſo the diſeaſe called St. Anthony's fire. It is generally uſed in treacle and mithridate, and in all other medicines that are uſed to procure reſt and ſleep, and to eaſe pains in the head, as well as in other parts. It is alſo uſed to cool inflammations, agues, or phrenſies, and to ſtay defluxions which cauſe a cough or conſumption, and alſo other fluxes of the belly: it is frequently put into hollow teeth to eaſe the pain thereof, and hath been found by experience to help gouty pains.

The wild poppy, or corn-roſe, Mathiolus ſaith is good to prevent the falling ſickneſs. The ſyrup made with the flowers is given with good effect to thoſe that have the pleuriſy; and the dried flowers alſo, either boiled in water or made into powder, and drunk, either in the diſtilled water of them, or in ſome other drink, work the like effect. The diſtilled water of the flowers is held to be of much good uſe againſt ſurfeits, being drunk evening and morning; it is alſo more cooling than any of the other poppies, and therefore cannot but be as effectual in hot agues, phrenſies, and other inflammations, whether external or internal, the ſyrup or water to be uſed inwardly, and the green leaves outwardly, either in an ointment or in any other convenient manner in which it can be applied. Galen ſaith, the ſeed is dangerous to be uſed inwardly.

## PURSLAIN.

GARDEN purſlain, being uſed as a ſallad-herb, is ſo well known that it needs no deſcription.

Government and Virtues. This is an herb of the moon. It is good to cool any heat in the liver, blood, reins, and ſtomach, and in hot agues nothing better can be adminiſtered; it ſtayeth hot and choleric fluxes of the belly, the menſes, fluor albus, gonorrhea, and running of the reins; alſo diſtillations from the head, and pains therein proceeding from heat, want of ſleep, or the phrenſy. The ſeed is more effectual than the herb, and is ſingularly uſeful in cooling the heat and ſharpneſs of the urine, luſt, venereous dreams, and the like, inſomuch that the over frequent uſe of it extinguiſheth the heat and virtue of natural procreation. The ſeed, bruiſed and boiled in wine, and given to children, expelleth worms. The juice of the herb is held equally effectual for all the purpoſes aforeſaid; as alſo to ſtay vomitings; taken with ſome ſugar or honey, it helpeth an old dry cough, ſhortneſs of breath, and the phthyſic, and ſtayeth immoderate thirſt. The diſtilled water of the herb is uſed by many, being more palatable, with a little ſugar, to produce the ſame effects. The juice alſo is good in ulcers and inflammations of the ſecret parts, likewiſe of the bowels, and hemorrhoids when they are ulcerous, or have excoriations in them. The herb, bruiſed, and applied to the forehead and temples, allayeth exceſſive heat therein, hindering reſt and ſleep; and, applied to the eyes, taketh away the redneſs and inflammation in them, and thoſe other parts where puſhes, wheals, pimples, St. Anthony's fire, and the like, break forth, eſpecially if a little vinegar be put to it; and being applied to the neck, with equal quantities of galls and linſeed together, taketh away all pain therefrom, and what is termed the crick in the neck. The juice is alſo uſed with oil of roſes for the above purpoſes, for blaſts by lightning, and burns by gunpowder, or for women's ſore breaſts, and to allay heat in all other ſores or hurts. Applied alſo to the navels of children that are too prominent, it reduceth them. It is likewiſe good for ſore mouths, and gums that are ſwelled, as well as to faſten looſe teeth. Camerarius ſaith, that the diſtilled water cured the tooth-ach when all other remedies failed; and that the thickened juice, made into pills with the powders of gum tragacanth and arabic, being taken, greatly relieveth thoſe that make bloody water. Applied to the gout, it eaſeth pains thereof, and helpeth hardneſs of the ſinews, if not ariſing from the cramp or a cold cauſe. This herb, if placed under the tongue, aſſuageth thirſt.

## PRIMROSES.

THESE are ſo well known that they need no deſcription. Of the leaves of primroſes is made an excellent ſalve to heal green wounds.

## PRIVET.

Description. THE common privet turns up with many ſlender branches to a tolerable height and breadth, and is frequently uſed in forming arbours, bowers, and banqueting-houſes, and ſhaped ſometimes into the forms of men, horſes, birds, &c. which, though at firſt requiring ſupport, grow afterwards ſtrong enough of themſelves. It beareth long and narrow green leaves by couples, and ſweet-ſmelling white flowers in tufts at the ends of the branches, which turn into ſmall black berries that have purpliſh juice within them, and ſome ſeeds that are flat on the one ſide, with a hole or dent therein.

Place. It groweth in divers woods in Great Britain.

Time. The privet flowereth in June and July, and the berries are ripe in Auguſt and September.

Government and Virtues. It is under the influence of the moon, and is but little uſed in phyſic in theſe times, except in lotions to waſh ſores and ſore mouths, and to cool inflammations and dry up fluxes; yet Mathiolus ſaith, it ſerveth every purpoſe for which the cypreſs tree, or oriental privet, is approved of by Dioſcorides and Galen. He further ſaith, that the oil extracted from the flowers of privet by infuſion, and ſet in the ſun, is very ſerviceable in inflammatory wounds, and for the head-ach when ariſing from a hot cauſe. There is a ſweet water alſo diſtilled from the flowers, which is good for all thoſe diſeaſes that require cooling and drying, and therefore helpeth all fluxes of the belly or ſtomach, bloody fluxes, and women's courſes, being either drunk or otherwiſe applied; as alſo for thoſe that void blood at their mouth or at any other place; likewiſe for diſtillations of rheums in the eyes, eſpecially if it be uſed with tutty.

## POMECITRON-TREE.

THERE are three kinds of pomecitrons. The tree is generally called *malus medica, vel citria.*

Description. 1. The great pomecitron tree, or *malus citria major*. This tree doth not grow very high in ſome places, but rather with a ſhort crooked body, and in others not much lower than the lemon-tree, ſpreading out into ſundry great long arms and branches; ſet with long and ſharp thorns, and fair, large, and broad, freſh green leaves, a little dented about the edges, with a ſhow of almoſt inviſible holes in them, but leſs than the orange-leaves have; of a ſweet ſcent, the flowers green at the leaves, all along the branches, being ſomewhat longer than thoſe of the orange; made of five thick, whitiſh, purple, or bluiſh, leaves, with ſome threads in the middle, after which followeth fruit all the year, being ſeldom ſeen without ripe fruit, and half-ripe, and ſome young and green, and bloſſoms all at once. This kind beareth great and large fruit, ſome the ſize of a muſk melon, others leſs, but all of them with a rugged, bunched-out, and uneven, yellow bark, thicker than in any of the other ſorts, with a ſour juice in the middle, and ſomewat great, pale, whitiſh, or yellow, ſeed, with a bitter kernel lying in it; the ſmell of this fruit is very ſtrong and comfortable to the ſenſes.

2. The ſmaller pomecitron tree, *citria malus minor, ſive limonera*; this tree groweth very like the former, but the leaves are ſomewhat ſmaller and ſhorter, and ſo are thorns: the flowers are of a deep bluiſh colour, and the fruit leſs and longer than they, but no longer than the ſmall fruit of the former; the rind is alſo thick and yellow, but not ſo rugged, having more ſour juice and fewer ſeed.

3. *Citria malus, ſive limonera pregnans.* This differs very little from the foregoing.

Place and Time. All theſe ſorts of citrons are cultivated in Spain by the curious, but were tranſported thither from ſundry places abroad. The great pomecitron was brought firſt from Media and Perſia, and was therefore called *malum Medicum* and *malum Perſicum.* The laſt was brought from the Fortunate Iſlands. They are continually in flower, and bear fruit throughout the year.

Government and Virtues. Theſe are ſolar plants, yet they are of different qualities; all the parts of the fruit hereof, both the outer and inner rind, as well as the juice and ſeed, are of excellent uſe, though of contrary effects one to another; ſome being hot and dry, whilſt others are cold and dry; the outer yellow rind is very ſweet in ſmell, highly aromatic, and bitter in taſte; and dried, is a ſovereign cordial for the heart, and an excellent antidote againſt venom and poiſon in caſes of the plague or any other infection; it warmeth and comforteth a cold and windy ſtomach, and diſperſeth cold, raw, and undigeſted, humours therein, or in the bowels, and mightily expelleth wind. Being chewed in the mouth, it helpeth a ſtinking breath; it alſo helps digeſtion, and is good againſt melancholy. The outer rinds are often uſed in cordial electuaries, and preſervatives againſt infection and melancholy. It alſo helpeth to looſen the body, and therefore there is a ſolutive electuary made therewith, called *electuarium de citrio ſolutivum*, to evacuate the bodies of cold phlegmatic conſtitutions, and may ſafely be uſed where choler is mixed with phlegm. The inner white rind of this fruit is rather unſavory, almoſt without taſte, and is not uſed in phyſic. The ſour juice in the middle is cold, and far ſurpaſſeth that of lemons in its effects, although not ſo ſharp in taſte. It is ſingularly good, in all peſtilential and burning fevers, to reſtrain the venom and infection, to ſuppreſs the choler and hot diſtemper of the blood, and to quench thirſt: and correcteth the bad diſpoſition of the liver. It ſtirreth up an appetite, and refreſhes the over-ſpent and fainting ſpirits; reſiſteth drunkenneſs, and helpeth giddineſs of the head, by the hot vapours ariſing therein, which cauſeth a phrenzy for want of ſleep. The ſeed not only equalleth the rind in its virtues, but in many inſtances ſurpaſſeth it.

## PEPPER.

Kinds and Names. THERE are ſeveral ſorts of pepper, as black, white, and long, pepper; called *piper nigrum, album, et longum.* The black, and white, pepper, differ not either in manner of growing, or in form of leaf or fruit. The long pepper alſo grows in the ſame manner, but differeth in the fruit. All theſe ſorts grow on a climbing buſh, in the Eaſt-Indies, after one manner, that is, as hops grow with us: ſo that, if they be not ſuſtained by ſome tree or pole, on which they may climb and ſpread, they will lie down on the ground, and thereon run and ſhoot forth ſmall fibres at every joint. But the uſual manner is to plant a branch taken from the buſh near ſome tall tree, great cane, or pole; and ſo it will quickly, by winding itſelf about ſuch props, get to the top thereof; it is full of joints, and ſhooteth forth fair, large, leaves, one at each joint, being almoſt round, but ending in a point, green above and paler underneath, with a great middle-rib, and four other ribs ſomewhat leſs, ſpreading from it, two on each ſide, and ſmaller therein alſo, unto the edges, which are ſmooth and plain, ſomewhat thin, and ſet on a pretty long footſtalk. The fruit, or pepper, whether black, white, or long, groweth at the ſame joint, but on the contrary ſide, oppoſite to the leaf, round about a long ſtalk, ſomewhat thinly ſet all along thereon, or not ſo cloſe as a bunch of grapes; the root hath ſundry joints creeping in the ground, with fibres at the joints. The white pepper is hardly diſtinguiſhable from the black, by the plants thereof, until it become ripe, (for the white and black pepper grow on different buſhes,) but that the leaves are of a little paler green colour, and the grains or berries are white, ſolid, firm, without wrinkles, and more aromatic. The long pepper hath leaves of very near the ſame form and ſize, but a little longer pointed, of a paler green colour, thinner alſo, and with a ſhorter foot-ſtalk, but four or five ribs ſometimes on each ſide, according to the largeneſs of the leaf, with other ſmaller veins therein, and has leſs acrimony and hot taſte than the black. The fruit of this alſo groweth in like manner at the joints, oppoſite to each leaf, which are cloſer ſet together than in the black, conſiſting of many ſmall grains as it were ſet cloſe together in rows, and not open and ſeparate as in the black and white pepper; of an aſh colour when it is ripe.

GOVERNMENT AND VIRTUES. All the peppers are under the dominion of Mars, and of temperature hot and dry almoſt in the fourth degree, but the white pepper is the hotteſt; which ſort is much uſed by the Indians, many of whom uſe the leaves as Europeans do tobacco; and even the pepper itſelf they alſo chew, taking from the branch one grain after another, while they are freſh.

Pepper is much uſed with us in meats and ſauces; comforteth and warmeth a cold ſtomach, conſumeth crude and moiſt humours therein, and ſtirreth up the appetite. It helpeth to break or diſſolve wind in the ſtomach or bowels, to provoke urine, to help the cough and other diſeaſes of the breaſt, and is effectual againſt the bitings of ſerpents, and other poiſons, and to that purpoſe it is an ingredient in the great antidotes: but the white pepper, as being more ſharp and aromatical, is of more effect in medicine; and ſo is the long, being more uſed to be given for agues to warm the ſtomach before the coming of the fit, thereby to abate the ſhaking thereof. All of them are uſed againſt the quinſey, being mixed with honey, and taken inwardly and applied outwardly, and diſperſe the kernels, as well in the throat as in any other part of the body.

Mathiolus maketh mention of a kind of pepper, which he calleth *piper Æthiopicum*, brought with other merchandize from Alexandria into Italy, and growing in long cods like beans or peaſe; but many cods ſet together at a place, whoſe grains within them being like pepper both in form and taſte, but ſmaller, ſtick very cloſe to the inſide; this ſort Serapio calleth *granum zelin*.

Monardus alſo maketh mention of a kind of long pepper, that groweth in all the tract of the continent in the Weſt-Indies. This kind of pepper is half a foot long, and of the thickneſs of a ſmall rope, conſiſting of many rows of ſmall grains, ſet cloſe together as in the head of plantane, and is black when ripe; and hotter in taſte, and more aromatical and pleaſant, than capſicum, and preferred before black pepper, and groweth (ſays he) on high trees or plants.

## GUINEA PEPPER.

Kinds and Names. THERE are many ſorts thereof found out and brought to our knowledge in theſe latter days. Gregorius de Riggio, a Capuchin friar, maketh mention of a dozen ſeveral ſorts or varieties, at the leaſt, in the fruit or cods, though in any thing elſe very little differing; there are likewiſe ſome other varieties, obſerved by Cluſius and others.

Description. The moſt ordinary Guinea pepper with long huſks, *capſicum majus vulgatius oblongis ſiliquis.* By this you may frame the deſcription of all the reſt, the main difference conſiſting in the form of the fruit, whether huſk or cods. This plant riſeth up with an upright, firm, round, ſtalk, with a certain pith within them; growing about two feet high in this country, and not exceeding three feet in any other hotter climate, ſpreading into many branches on all ſides, even from the very bottom, which divide themſelves again into other ſmaller branches, at each joint whereof come two long leaves upon ſhort foot ſtalks, ſomewhat bigger than thoſe of nightſhade, with divers veins in them, not dented about the edges at all, and of a dark-green colour; the flowers ſtand ſeverally at the joints, with leaves like the flowers of nightſhade, conſiſting moſt uſually of five, and ſometimes ſix, white ſmall-pointed leaves, ſtanding open like a ſtar; with a few yellow threads in the middle, after which come the fruit, either great or ſmall, long or ſhort, round or ſquare, as the kind is, either ſtanding upright or hanging down, as their flowers ſhew themſelves either of this or that form; in this, about three inches in length, thick and round at the ſtalk, and ſmaller towards the end, which is not ſharp, but round-pointed, green at the firſt, but when full ripe of a very deep ſhining crimſon colour: on the outſide of which is a thick ſkin, and white on the inſide, of a ſweet pleaſant ſmell, having many flat yellow ſeeds therein, cleaving to certain thin ſkins within it, which are broad at the upper end and narrow at the lower, leaving the end or point empty within, not reaching ſo far; the huſk or ſeed of which is of ſo hot and fiery a taſte, as to inflame and burn the mouth and throat for a long time after it is chewed, and almoſt ready to choak one that taketh much at a time thereof: the root is compoſed of a great tuft or buſh of threads, which ſpreads plentifully on the ground, and periſheth even in hot countries after it hath ripened all its fruit.

There are nineteen other ſorts of Guinea pepper, all which, except the undermentioned, differ ſo little from that already deſcribed, as not to be worth explanation.

Guinea pepper with hairy ſtalks, *capſicum caule piloſo.* This groweth with green round ſtalks, ſet full of white hairs, contrary to all other ſorts; at the branches come forth ſorth two ſuch leaves as the before-mentioned one hath, but rather larger; the flowers are white, conſiſting of five leaves like the reſt, which are likewiſe larger; after which come the cods, green at firſt, and, when ripe, red like the reſt, which are ſomewhat great and long, ending a very long point; not differing from the former ſorts in the ſeed and roots.

Place and Time. All theſe ſorts of pepper came from the Weſt-Indies, called America, and the ſeveral parts thereof, Braſil being reckoned as a part of it, and our Summer Iſlands alſo; but here in England (though erroneouſly) we give it the name of Guinea pepper, as though it originally came from thence. They are now raiſed in gardens in all the provinces of Europe, excepting in very cold countries, and grow in many places of Italy, Spain, &c.

They do not ſow them in hot countries before the end of March or beginning of April, and at the ſooneſt they do not flower before Auguſt following, and their red cods ripen not thoroughly until November, when they will continue both with flower and fruit moſt of the winter, where the weather is not very intenſe; but in very cold climates they periſh with the firſt froſt, and therefore muſt be carefully houſed, if any will preſerve them.

Government and Virtues. All theſe ſorts of pepper are under Mars, and are of a fiery, hot, and ſharp, biting taſte, and of a temperature hot and dry to the end of the fourth degree; they burn and inflame the mouth and throat ſo extremely, that it is hard to be endured; and, if it be outwardly applied to the ſkin in any part of the body, it will exulcerate and raiſe it as if it had been burnt with fire or ſcalded with hot water. The vapours that ariſe from the huſks or cods, while one doth but open them to take out the ſeed, (eſpecially if they beat them into powder, or bruiſe them,) will ſo pierce the brain, by flying up into the head through the noſtrils, as to produce violent ſneezings, and draw down abundance of thin rheum, forcing tears from the eyes, and will all paſs into the throat, and provoke a ſharp coughing, and cauſe violent vomiting; and, if any ſhall with their hands touch their face or eyes, it will cauſe ſo great an inflammation, that it will not be remedied in a long time, by all the bathing thereof with wine or cold water that can be uſed, but yet will paſs away without further harm. If any of it be caſt into fire, it raiſeth grievous ſtrong and noiſome vapours, occaſioneth ſneezing, coughing, and ſtrong vomiting, to all that be near it; if it ſhould be taken ſimply of itſelf, (though in a very ſmall quantity, either in powder or decoction,) it would be hard to endure, and might prove dangerous to life.

Having now given you an account of the dangers attending the immoderate uſe of theſe violent plants and fruits, I ſhall next direct you how to proceed in order to make them become ſerviceable for health, being corrected and cleanſed from all their evil and noiſome qualities.

*Preparation of the Guinea Pepper.*

Take the ripe cods of any ſort of the Guinea pepper, (for they are in property all alike,) and dry them well, firſt of themſelves, and then in an oven after the bread is taken out: put it into a pot or pipkin, with ſome flour, that they may be quite dried; then cleanſe them from the flour, and their ſtalks, if they have any; cut both huſks and ſeeds within them very ſmall, and to every ounce of them put a pound of wheat-flour; make them up together into cakes or ſmall loaves, with leaven proportioned to the quantity you make; bake theſe as you do bread of the ſmall ſize, and, when baked, cut it again into ſmaller parts, and then bake it again, that it may be as dry and hard as a biſcuit, which, beaten into fine powder, and ſifted, may be kept for any of the uſes hereafter mentioned, or may ſerve inſtead of ordinary pepper, to ſeaſon meat or broth, for ſauce, or any other purpoſe the Eaſt-Indian pepper doth ſerve; for it doth not only give good taſte or reliſh to the meat or ſauce, but is found to be very good both to diſcuſs the wind and the cholic in the body. It is of ſingular ſervice to be uſed with flatulent or windy diet, and ſuch as breeds moiſture and crudities; one ſcruple of the ſaid powder, taken in a little broth of veal or of a chicken, gives great relief and comfort to a cold ſtomach, cauſing phlegm and ſuch viſcous humours as lie low in the bottom thereof to be voided; it helpeth digeſtion, for it occaſioneth an appetite to meat, provoketh urine, and, taken with ſaxifrage water, expelleth the ſtone in the kidneys and the phlegm that breedeth them; and taketh away dimneſs or miſtineſs of the ſight, being uſed in meats; taken with Pillulæ Aleophanginæ, it helpeth the dropſy; the powder, taken for three days together in the decoction of pennyroyal, expelleth the dead birth; but, if a piece of the cod or huſk, either green or dry, be put into the womb after delivery, it will make them barren for ever after; but the powder, taken for four or five days faſting, with a little fennel-ſeed, will eaſe all pains of the mother. The ſame alſo made up with a little powder of gentian and oil of bays into a peſſary, with ſome cotton-wool, doth bring down the courſes; the ſame, mixed with a lohoch or electuary for the cough, helpeth an old inveterate cough; being mixed with honey and applied to the throat, it helpeth the quinſey; and made up with a little pitch or turpentine, and laid upon any hard knots or kernels in any part of the body, it will diſſolve them, and not ſuffer any more to grow there; and, being mixed with nitre and applied, it takes away the morphew, and all freckles, ſpots, marks, and diſcolourings, of the ſkin; applied with hens greaſe, it diſſolveth all cold impoſthumes and carbuncles; and, mixed with ſharp vinegar, it diſſolveth the hardneſs of the ſpleen: mixed with *unguentum de alabaſtro*, and the reins of the back anointed therewith, it will take away the ſhaking fits of agues; a plaſter made thereof, with the leaves of tobacco, will heal the ſting or biting of any venomous beaſts.

The decoction of the huſks themſelves, made with water, and the mouth gargled therewith, helpeth the tooth-ach, and preſerveth the teeth from rottenneſs; the aſhes of them being rubbed on the teeth, will cleanſe them, and make them look white. The decoction of them in wine helpeth the *hernia ventoſa*, or watery rupture, if applied warm morning and evening: if put to ſteep for three days together in aquavita, it helpeth the palſy, the place affected being bathed therewith; and, ſteeped for a day in wine and two ſpoonfuls drunk thereof every day faſting, it is of ſingular ſervice in rendering ſtinking breath ſweet.

## PITCH-TREE.

Names. THIS tree is called in Latin *picea* and *pitis*.

Description. This pitch tree is of an indifferent bigneſs, and tall ſtature, but not ſo great as the pine-tree, and always green, like the pine and fir trees. The timber is fat, and doth yield an abundance of roſin of divers ſorts; the branches are hard, and parted into other ſprays, moſt commonly croſs-wiſe, upon which grow ſmall green leaves, not round about the branches, but by every ſide, one right over-againſt another, like little feathers; the fruit is ſmaller than the fruit of the pine-tree. In burning of this tree, there doth iſſue out pitch, as doth alſo out of the pine-tree.

Place and Time. The pitch-tree grows in many places of Greece, Italy, France, and Germany, and the fruit thereof is ripe in September.

Government and Virtues. The leaves, bark, fruit, kernels, or nuts of this tree, are almoſt of the ſame nature, virtues, and operations, as the leaves, bark, fruit, and kernels, of the pine-tree.

### *The Roſin that cometh out of the Pine or Pitch Trees.*

Out of the pine and pitch trees riſe three ſorts of roſin, beſides the pitch and tar:

1. The one floweth out by force of the heat of the ſun in ſummer, from the wood or timber where it is broken or cut.

2. The other is found both upon and between the bark of the pine and pitch tree, and moſt commonly in ſuch parts thereof as are cut or any otherwiſe impaired.

3. The third kind groweth betwixt the ſcales of the fruit.

Names. All the kinds of roſin are called in Latin *reſina*, in French *reſine*, and in Dutch *herſt*, The firſt kind is called *reſina liquida*, and *reſina pini*; of this ſort is alſo the roſin which is molten with the ſun in ſummer, and remaineth dry, and may be made into powder, which ſome call *reſina arida*, or dry roſin.

The ſecond kind is called in Latin *reſina arida*; that which ſweateth out of the pine tree is called *reſina pinea*, and that which cometh out of the pitch-tree *reſina picea*. The third kind is called *reſina ſtrobilina*.

GOVERNMENT AND VIRTUES. All the roſins are ſolar, and of an hot and dry temperature, and of a ſcouring and cleanſing nature. Roſin doth cleanſe and heal freſh wounds, and therefore is a principal ingredient in all ointments and plaſters that ſerve for that purpoſe. It ſofteneth hard ſwellings, and is comfortable to bruiſed parts or members, being applied, or laid to, with oils, ointments, or plaſters, appropriated to that uſe.

## PITCH AND TAR.

KINDS AND NAMES. There are two ſorts of pitch: the one moiſt, called liquid pitch, the other is hard and dry: they do both run out of the pine and pitch tree, and out of certain other trees, as the cedar, turpentine, and larch, trees, by burning of the wood and timber of them. Pitch is called in Latin *pix*, in French *poix*, in Dutch *peck*. The liquid pitch is called in Latin *pix liquida*, in Brabant *teer*, and in Engliſh *tar*. The dry pitch is called in Latin *pix arida*, and *navalis*; in Engliſh ſhip-pitch or ſtone-pitch; in Dutch *ſteen-peck*.

GOVERNMENT AND VIRTUES. The pitch and tar are both ſolar, hot and dry in the ſecond degree, and of ſubtile parts, but the ſtone-pitch is the drieſt; the liquid pitch or tar is the hotter and of more ſubtile parts. Liquid pitch, taken with honey, doth cleanſe the breaſt, and is good to be licked in by thoſe that are troubled with ſhortneſs of breath, whoſe inſide is clogged with corrupt matter. It mollifieth and bringeth to perfection all hard ſwellings, and is good to anoint the neck againſt the ſquinancy or ſwelling of the throat: it is good to be put into mollifying plaſters, anodynes to take away pains, and maturatives, or ripening medicines: being applied with barley-meal, it ſofteneth the hardneſs of the matrix and fundament; liquid pitch mingled with *ſulphur vivum*, or quick brimſtone, repreſſeth fretting ulcers, foul ſcabs and ſcurf; and, if ſome ſalt be put thereto, it is good to be laid upon the wounds occaſioned by the bite or ſting of any ſerpent or viper. It cureth the rifts and cloven chaps that happen to the hands, feet, &c.

The ſtone-pitch being pounded very ſmall, with the fine powder of frankincenſe, healeth hollow ulcers and fiſtulas, filling them up with fleſh: the ſtone-pitch is not ſo ſtrong as the liquid pitch, but is much better, it being more apt to cloſe up the lips of wounds.

## POMEGRANATE-TREE.

Kinds and Names. THE pomegranate-tree is diſtinguiſhed into three kinds; that is, the manured pomegranate bearing fruit, and the greater and leſſer wild kinds: the firſt is called *malus punicum* and *malus granata*, and the fruit *malum punicum* and *malum granatum*, becauſe it is ſuppoſed that they were brought over, from that part of Africa where old Carthage ſtood, into that part of Spain which is now called Granada, and from thence called Granatum. The flowers of the manured kind (as Dioſcorides ſaith) are called *citini*; but Pliny calleth the flowers of the wild kind *citinus*, and the flowers of both kinds *balauſtium*; but *citinus* is more properly the cup wherein do ſtand the flowers of both kinds: *balauſtium* is with us generally taken for the double flowers of the wild kind only.

Description. The pomegranate-tree bearing fruit, *malus punica ſativa*. This tree groweth not great in the warm countries, and where it is natural not above ſeven or eight feet high, ſpreading into many ſlender branches, here and there ſet with thorns, and with many very fair, green, ſhining leaves, like the leaves of large myrtle, every one upon a ſmall and reddiſh footſtalk. Among the leaves come forth, here and there, the flowers, which are like bell-flowers, broad at the brims, and ſmaller at the bottom, being one whole leaf divided at the top into five parts, of an orient crimſon colour naturally, but much paler with us, and many veins running through it, with divers threads in the middle, and ſtanding in a browniſh hollow cup or long hard huſk: the fruit is great and round, with a hard, ſmooth, browniſh-red rind; not very thick, but yellowiſh on the inſide, and a crown at the top, ſtored plentifully with a fine clear liquor or juice, like wine, full of ſeeds incloſed in ſkins, and the liquor among them. Sometimes this breaketh the rind as it groweth, which will cauſe it to rot very ſoon.

Place and Time. The manured kinds grow in Spain, Italy, Portugal, and other warm countries; but here in England they are preſerved and houſed with great care, (yet come not to perfection,) and the wild kind with much more; they ſeldom flower with us.

Government and Virtues. The ſun governs theſe plants and fruits. Pomegranates are hot and moiſt, but yet moderate: all the ſorts breed good blood, yet do they yield but ſlender nouriſhment; they are very helpful to the ſtomach: thoſe that are ſweet are moſt pleaſant, yet they ſomewhat heat, and breed wind and choler, and therefore they are forbidden in agues; and thoſe that are ſour are fit for a hot fainting ſtomach, ſtay vomiting, and provoke urine, but are ſomewhat offenſive to the teeth and gums in the eating. The ſeed within the fruit, and the rind thereof, do bind very forcibly, whether the powder or the decoction be taken, and ſtay caſting, the bloody flux, women's courſes, the ſpitting of blood, and running of the reins, and it is ſaid to be good for the dropſy: the flowers work the ſame effects. The fruit is good againſt the bite of the ſcorpion, and ſtayeth the immoderate longings of women with child; the decoction of the rind or ſeeds of the fruit, with a little ſyrup put to it, is good againſt the cankers in the mouth and ulcers in any part of the body, and againſt ruptures; it alſo helpeth ulcers in the ears or noſe, or rheums in the eyes, being dropped or injected; it faſteneth looſe teeth, deſtroyeth the flat worms in the body, and helpeth to take away wens. With the rinds of pomegranates, inſtead of galls, or with galls, is made the beſt writing-ink, both for blackneſs and durability.

## QUEEN OF THE MEADOWS, OR MEADOW-SWEET.

Description. THE ſtalks of this are reddiſh, riſing to be three feet high, ſometimes four or five feet, having at the joints thereof large winged leaves ſet on each ſide of a middle-rib, being hard, rough, or rugged, crumpled like elm-leaves, having alſo ſome ſmaller leaves with them, (as agrimony hath,) ſomewhat deeply dented about the edges, of a ſad green colour on the upper ſide, and greyiſh underneath, of a pretty ſharp ſcent and taſte, ſomewhat like unto burnet; and a leaf thereof, put into a cup of claret, giveth it a fine reliſh: at the tops of the ſtalks and branches ſtand many tufts of ſmall white leaves thick together, which ſmell much ſweeter than the leaves; and in their places, being fallen, come crooked and cornered ſeed. The root is ſomewhat woody, and blackiſh on the outſide, and browniſh within, with divers greater ſtrings and ſmaller fibres ſet thereat, of a ſtrong ſcent, but not ſo pleaſant as the flowers and leaves; it abideth many years, ſhooting forth anew every ſpring.

Place. It grows in moiſt meadows, or near the courſes of water.

Time. It flowereth in ſome place or other all the three ſummer months, viz. June, July, and Auguſt; and the ſeed is ripe quickly after.

Government and Virtues. Venus claims dominion over this herb. It is uſed to ſtay all manner of bleedings, fluxes, vomitings, and women's courſes, as alſo their whites: it is ſaid to take away the fits of quartan agues, and to make a merry heart, for which purpoſe ſome uſe the flowers, and ſome the leaves. It ſpeedily helpeth thoſe that are troubled with the cholic, being boiled in wine; and, with a little honey, taken warm, it openeth the belly: but, boiled in red wine, and drunk, it ſtayeth the flux of the belly. Being outwardly applied, it healeth old ulcers that are cancerous or eaten, or hollow and fiſtulous, for which it is by many much commended, as alſo for ſores in the mouth or ſecret parts. The leaves, when they are full grown, being laid upon the ſkin, will in a ſhort time raiſe bliſters thereon. The water thereof helpeth the heat and inflammation of the eyes.

## QUINCE-TREE.

Description. The ordinary quince-tree groweth often to the height and bigneſs of an apple-tree, but more uſually lower, and crooked, with a rough bark, and branches ſpreading far abroad. The leaves are ſomewhat like thoſe of the apple-tree, but thicker, broader, and fuller of veins, and whiter on the under-ſide, not dented at all about the edges. The flowers are large and white, ſometimes daſhed over with a bluſh. The fruit, when ripe, is yellow, and covered with a white frieze or cotton, thick ſet on the younger, and growing leſs as they become thoroughly ripe, bunched out oftentimes in ſome places, ſome being like an apple, and ſome a pear, of a ſtrong heady ſcent, not durable to keep, and of a ſour, harſh, and unpleaſant, taſte, to eat freſh; but, being ſcalded, roaſted, baked, or preſerved, it becomes more pleaſant.

Place and Time. It thrives and grows beſt near the water-ſide, and is common throughout Great-Britain; it flowereth not until the leaves come forth. The fruit is ripe in September or October.

Government and Virtues. Old Saturn owns the tree. Quinces, when they are green, help all ſorts of fluxes in man or woman, and choleric laſks, caſtings, and whatſoever needeth aſtriction, more than any way prepared by fire: yet the ſyrup of the juice, or the conſerve, is rather opening, much of the binding quality being conſumed by the fire; and, if a little vinegar be added, it ſtirreth up the languiſhing appetite, and ſtrengtheneth the ſtomach; ſome ſpices being added, it comforteth and cheereth the decayed and fainting ſpirits, helpeth the liver when oppreſſed ſo that it cannot perfect the digeſtion, and correcteth choler and phlegm. If you would have them purging, put honey to them inſtead of ſugar; and, if more laxative, for choler, rhubarb; for phlegm, turbith; for watery humours, ſcammony: but, if more forcibly to bind, uſe the unripe quinces, with roſes, acacia, or hypociſtis, and ſome torrified rhubarb. To take the crude juice of quinces is held a preſervative againſt the force of deadly poiſon; for it hath been found moſt true, that the very ſmell of a quince hath taken away all the ſtrength of the poiſon of white hellebore. If there be need of any outward binding and cooling of any hot fluxes, the oil of quinces, or any medicine that may be made thereof, is very available to anoint the belly or other parts. It likewiſe ſtrengtheneth the ſtomach and belly, and the ſinews that are looſened by ſharp humours falling on them, and reſtraineth immoderate ſweating. The mucilage, taken from the ſeeds of quinces, and boiled in a little water, is very good to cool the heat, and heal the ſore breaſts of women. The ſame with a little ſugar is good to lenify the harſhneſs and ſoreneſs of the throat and roughneſs of the tongue. The cotton or down of quinces, boiled, and applied to plague-ſores, healeth them up; and, laid as a plaiſter, made up with wax, it bringeth hair to them that are bald, and keepeth it from falling off.

## QUICK-GRASS.

Kinds and Names. There are ſeveral ſorts of theſe graſſes, ſome growing in the fields and other places of the upland grounds, and others near the ſea: it is alſo called dog-graſs, and *gramen caninum*; the other ſeveral names ſhall follow in the deſcriptions.

Description. 1. Common quick-graſs, *gramen caninum vulgare*. This graſs creepeth far about under ground, with long white jointed roots, and ſmall fibres almoſt at every joint, very ſweet in taſte, as the reſt of the herb is, and interlacing one another; from whence ſhoot forth many fair and long graſs leaves; ſmall at the ends, and cutting or ſharp at the edges; the ſtalks are joined like corn, with the like leaves on them, and a long ſpiked head, with long huſks on them, and hard rough ſeed in them.

2. Quick-graſs with a more ſpreading panicle, *gramen caninum longius, radicatum, et paniculatum*. This differeth very little from the former, but in the tuft, or panicle, which is more ſpread into branches, with ſhorter and broader huſks; and in the root, which is fuller, greater, and farther ſpread.

3. The ſmaller quick-graſs with a ſparſed tuft, *gramen caninum, latiore panicula minus*. This ſmall quick-graſs with ſlender ſtalks, about half a foot high, with many very narrow leaves, both below and on the ſtalks; the tuft, or panicle, at the top, is ſmall according to the plant, and ſpreadeth into ſundry parts, or branches: the root is ſmall and jointed, but creepeth not ſo much, and has many more fibres than the others have, and is a little browner, but more ſweet.

4. Low-bending quick-graſs, *gramen caninum, arvenſe*. This creepeth much under ground, but in a different manner, the ſtalk taking root in divers places, and ſcarcely

riſing a foot high; with ſuch-like green leaves as the ordinary, but ſhorter; the ſpiked head is bright, and ſpreadeth abroad ſomewhat like the field-graſs.

5. *Gramen caninum ſupinum monſpelienſe.* This differeth very little from the laſt, in any other part thereof than in the panicle, or ſpiked head; which is longer, and not ſpread or branched into parts as that is.

6. A ſmall ſweet graſs like quick-graſs, *gramen exile tenuifolium, canariæ ſimile, ſive gramen dulce.* This ſmall graſs hath many low creeping branches, rooting at the joints, like the two laſt; having a number of ſmall and narrow leaves on them, much leſs than they; and a ſmall ſparſed panicle, ſomewhat like the red dwarf-graſs.

7. Wall-graſs with a creeping root, *gramen murorum radice repente.* This wall-graſs, from a blackiſh creeping root, ſpringeth forth with many ſtalks a foot high, bending or crooking with a few narrow ſhort leaves on them, at whoſe tops ſtand ſmall white panicles, of an inch and a half long, made of many ſmall chaffy huſks.

Place and Time. The firſt is uſual and common in divers plowed grounds and gardens, where it is often more bold than welcome, troubling the huſbandmen as much, after the plowing up of ſome of them, (as, to pull up the reſt after the ſpringing, and, being raked together, to burn them,) as it doth the gardeners, where it happeneth, to weed it out from amongſt their trees and herbs; the ſecond and third are more ſcarce, and delight in ſandy and chalky grounds; the three next are likewiſe found in fields that have been plowed and do lie fallow; and the laſt is often found on old decayed walls in divers places; they flouriſh in the beginning of ſummer.

Government and Virtues. Theſe are plants of Mercury. The root is of temperature cold and dry, and hath a little mordacity in it, and ſome tenuity of parts; the herb is cold in the firſt degree, and moderate in moiſture and dryneſs; but the ſeed is much more cold and drying. This quick-graſs is moſt medicinal of all other ſorts of graſſes: it is effectual to open obſtructions of the liver and ſpleen, and the ſtoppings of urine, the decoction thereof being drunk; and to eaſe the griping pains in the belly, and inflammations; and to waſte the excrementitious matter of the ſtone in the bladder, and the ulcers thereof; alſo the root, being bruiſed and applied, doth knit together and conſolidate wounds: the ſeed doth more powerfully expel urine, bindeth the belly, and ſtayeth vomiting; the diſtilled water is good to be given to children for the worms.

## RADDISH and HORSE-RADDISH.

THE garden-raddiſh is ſo well known that it needeth no deſcription.

Description. The horſe-raddiſh hath its firſt leaves riſing before winter, about a foot and a half long, very much cut in or torn on the edges into many parts, of a dark green colour, with a great rib in the middle; after thoſe have been up a while, others follow, greater, rougher, broader, and longer, whole, and not divided as the firſt, but only ſomewhat roundly dented about the edges. The ſtalk, when it beareth flowers, (which is but ſeldom,) is great, riſing up with ſome few ſmaller leaves thereon to three or four feet high, ſpreading at the top many ſmall branches of white flowers, of four leaves each; after which come ſmall pods, like thoſe of ſhepherds-purſe, but ſeldom with any ſeed in them. The root is large, long, white, and rugged, ſhooting up divers heads of leaves; but it doth not creep within ground, nor run above ground; and is of a ſtrong, ſharp, and bitter, taſte, almoſt like muſtard.

Place. It is found wild in ſome places in England, but is chiefly planted in gardens, where it thrives in moiſt and ſhady places.

Time. It flowereth but ſeldom, but, when it doth, it is in July.

Government and Virtues. They are both under Mars. The juice of horſe-raddiſh, given to drink, is held to be very effectual for the ſcurvy. It killeth the worms in children, being drunk, and alſo laid upon the belly. The root bruiſed, and laid to the place grieved with the ſciatica, joint-ach, or hard ſwellings of the liver and ſpleen, doth wonderfully help them all. The diſtilled water of the herb and roots is more commonly taken with a little ſugar for all the purpoſes aforeſaid.

Garden raddiſhes are eaten as ſallad, but they breed humours in the ſtomach, and corrupt the blood; yet, for ſuch as are troubled with the gravel, ſtone, or ſtoppage of urine, they are good phyſic, if the body be ſtrong that takes them; the juice of the roots may be made into a ſyrup for that uſe: they purge by urine exceedingly. Sleep not preſently after the eating of raddiſh, for that will cauſe a ſtinking breath.

## RAG-WORT.

It is called St. James's-wort, ſtagger-wort, ſtammer-wort, and ſeggrum.

Description. The greater common rag-wort hath many large and long dark-green leaves lying on the ground, very much rent and torn on the ſides into many pieces; from among which riſe up ſometimes one and ſometimes two or three ſquare or creſted blackiſh ſtalks three or four feet high, ſometimes branched, bearing divers ſuch-like leaves upon them at ſeveral diſtances unto the tops, where it brancheth forth into many ſtalks bearing yellow flowers, conſiſting of a number of leaves ſet as a pale, or border, with a dark yellow thrum in the middle, which at laſt turns into down, and, with the ſmall blackiſh grey ſeed, are carried away with the wind. The root is made of many fibres, whereby it is firmly faſtened into the ground, and abideth many years.

There is another ſort hereof different from the former only in this, that it riſeth not ſo high: the leaves are not ſo finely jagged, nor of ſo dark a green colour, but rather whitiſh, ſoft, and woolly, and the flowers uſually paler.

PLACE. They both grow wild in paſtures and untilled grounds in many places, and oftentimes both of them in one field.

TIME. They flower in June and July, and the ſeed is ripe in Auguſt.

GOVERNMENT AND VIRTUES. Rag-wort is under the command of Venus, and cleanſeth, digeſteth, and diſcuſſeth. The decoction of this herb is good for ulcers in the mouth or throat, and for ſwellings, hardneſs, or impoſthumations, for it thoroughly cleanſeth and healeth them; as alſo the quinſey and the king's evil. It helpeth to ſtay catarrahs, thin rheum, and defluxions from the head into the eyes, noſe, or lungs. The juice is found by experience to be good to heal green wounds, and to cleanſe and heal old and filthy ulcers; as alſo inward wounds and ulcers, and ſtayeth the malignity of fretting or running cancers, and hollow fiſtulas, not ſuffering them to ſpread further. It is alſo much commended to help achs and pains, either in the fleſhy parts or in the nerves and ſinews; as alſo the ſciatica, or pain of the hips. Bathe the places with the decoction of the herb, or anoint them with an ointment made of the herb bruiſed and boiled in hog's-lard, with maſtic and olibanum in powder added to it after it is ſtrained. In Suſſex this herb is called ragwood. Externally it hath been praiſed with good reaſon againſt ſwellings, and in inflammations: they are to be boiled to ſoftneſs, and applied as a warm poultice with bread and oil.

## RATTLE-GRASS.

OF this there are two kinds, the red and the yellow.

DESCRIPTION. The common red rattle-graſs hath ſundry reddiſh hollow ſtalks, and ſometimes green, riſing from the root, lying for the moſt part on the ground, yet ſome growing more upright, with many ſmall reddiſh or greeniſh leaves ſet on both ſides of a middle-rib finely dented about the edges: the flowers ſtand at the tops of the ſtalks and branches, of a fine purpliſh red colour; after which come flat blackiſh ſeed in ſmall huſks, which, lying looſe therein, will rattle with ſhaking. The root conſiſts of two or three ſmall whitiſh ſtrings, with ſome fibres thereat.

The common yellow rattle hath ſeldom above one round green ſtalk, riſing from the root, about half a yard or two feet high, and but few branches thereon, having two long and ſomewhat broad leaves ſet at a joint, deeply cut in on the edges, reſembling the comb of a cock, broadeſt next the ſtalk. The flowers grow at the tops of the ſtalks, with ſome ſhorter leaves with them, hooded after the ſame manner as the others, but many of a fair yellow colour, in ſome paler, in ſome whiter. The ſeed is contained in large huſks; the root is ſmaller and ſlender, periſhing every year.

Place. They grow in meadows and woods generally throughout England.

Time. They are in flower from Midſummer till Auguſt.

Government and Virtues. They are both under the dominion of the moon. The red rattle is reckoned good to heal fiſtulas and hollow ulcers, and to ſtay the flux of humours to them, or any other flux of blood, being boiled in red or white wine and drunk.

The yellow rattle, or cock's comb, is held to be good for thoſe that are troubled with a cough, or dimneſs of ſight; if the herb, being boiled with beans, and ſome honey put thereto, be drunk, or dropped into the eyes, it draweth forth any ſkin, dimneſs, or film, from the ſight, without trouble or pain.

## REST-HARROW, or CAMMOAK.

Description. COMMON reſt-harrow riſeth up with divers rough woody twigs, two or three feet high, ſet at the joints without order, with a little-roundiſh leaves, ſometimes more than two or three at a place, of a dark-green colour, without thorns while they are young, but afterwards armed in ſundry places with ſhort and ſharp thorns. The flowers come at the tops of the twigs and branches, whereof it is full, faſhioned like peaſe, or bloom bloſſoms, but ſmaller, flatter, and ſomewhat cloſe, of a faint purpliſh colour: after which come ſmall pods, containing ſmall, flat, and round, ſeed. The root is blackiſh on the outſide, and whitiſh within: very rough and hard to break when it is freſh and green, and as hard as an horn when it is dried, thruſting down deep into the ground, and ſpreading likewiſe, every piece being likely to grow again if it be left in the ground.

Place. It groweth in many places of Great-Britain, as well in arable as in waſte ground.

Time. It flowereth in general about the beginning or middle of July, and the ſeed is ripe in Auguſt.

Government and Virtues. It is under the dominion of Mars. It is good to provoke urine and to break and expel the ſtone, which the powder of the bark of the root taken in wine performs effectually. Mathiolus ſaith, the ſame helpeth the diſeaſe called hernia carnoſa, the fleſhy rupture, by taking the ſaid powder for ſome months together conſtantly, and that it hath cured ſome which ſeemed incurable by any other means than by cutting or burning. The decoction thereof, made with ſome vinegar, and gargled in the mouth, eaſeth the tooth-ach, eſpecially when it comes of rheum; and is very powerful to open obſtructions of the liver and ſpleen, and other parts. A diſtilled water, made in balneo mariæ with four pounds of the roots hereof, firſt ſliced ſmall, and afterwards ſteeped in a gallon of canary wine, is very good for all the purpoſes aforeſaid, and to cleanſe the paſſages of the urine. The powder of the ſaid root made into an electuary or lozenges with ſugar, as alſo the bark of the freſh roots boiled tender, and afterwards beaten into a conſerve with ſugar, worketh the like effect. The powder of the roots, ſtrewed upon the brims of ulcers, or mixed with any other convenient thing and applied, conſumeth the hardneſs, and cauſeth them to heal the better.

## ROCKET.

AS the garden-rocket is rather uſed as a ſallad-herb than to any phyſical purpoſes, I ſhall omit it, and only ſpeak of the common wild rocket.

Description. The common wild rocket hath longer and narrower leaves, much more divided into ſlender cuts and jags on both ſides of the middle-rib than the garden kinds have, of a ſad-green colour, from among which riſeth up divers ſtiff ſtalks, two or three feet high, ſometimes ſet with the like leaves, but ſmaller, and much leſs upwards, branched from the middle into ſundry ſtalks, bearing yellow flowers of four leaves each, as the others are, which afterwards yield ſmall reddiſh ſeed, in ſmall long pods, of a more bitter and hot biting taſte than the garden kinds, as are the leaves likewiſe.

Place. It is found wild in moſt places of Great-Britain.

Time. It flowereth about June and July, and the ſeed is ripe in Auguſt.

Government and Virtues. The wild rockets are forbidden to be uſed alone, becauſe their ſharpneſs fumeth into the head, cauſing ach and pain: and are no leſs hurtful to hot and choleric perſons, for fear of inflaming their blood. Mars rules them. The wild rocket is more ſtrong than the garden kinds; it ſerveth to help digeſtion, and provoke urine exceedingly. The ſeed is uſed to cure the bitings of ſerpents, the ſcorpion, the ſhrew-mouſe, and other poiſons, and expelleth the worms and other noiſome creatures that breed in the body. The herb, boiled or ſtewed and ſome ſugar put thereto, helpeth the cough in children, being taken often. The ſeed alſo, taken in drink, taketh away the ill ſcent of the arm-pits, increaſeth milk in nurſes, and waſteth the ſpleen. The ſeed, mixed with honey, and uſed on the face, cleanſeth the ſkin from ſpots, morphew, and other diſcolourings; and, uſed with vinegar, taketh away freckles and redneſs in the face or other parts; and, with the gall of an ox, it amendeth foul ſcars, black ſpots, and the marks of the ſmall-pox.

## WINTER ROCKET, OR CRESSES.

Description. WINTER rocket, or winter creſſes, hath divers ſomewhat like turnip-leaves, with ſmaller pieces next the bottom, and broad at the ends, which ſo abide all winter, (if it ſpring up in autumn, when it is uſed to be eaten,) from among which riſeth up divers ſmall round ſtalks full of branches, bearing many ſmall yellow flowers of four leaves each, after which come ſmall long pods with reddiſh ſeed in them. The root is rather ſtringy, and periſheth every year after the ſeed is ripe.

Place. It groweth of its own accord in gardens, and fields, by the way-ſides, in divers places.

Time. It flowereth in May, and ſeedeth in June, and then periſheth.

Government and Virtues. This is profitable to provoke urine, and helpeth the ſtranguary, and to expel gravel and the ſtone; it is alſo of good effect in the ſcurvy. It is found by experience to be a good herb to cleanſe inward wounds; the juice or decoction, being drunk, or outwardly applied to waſh foul ulcers and ſores, cleanſeth them by ſharpneſs, and hindereth the dead fleſh from growing therein, and healeth them by the drying quality.

## ROSES.

I HOLD it needleſs to trouble the reader with a deſcription of theſe, ſince both the garden roſes and the wild roſes of the briers are well enough known; take therefore the virtues of them as followeth; and firſt I ſhall begin with the garden kinds.

Government and Virtues. Red roſes are under Jupiter, damaſk under Venus, and white under the Moon. The white and the red roſes are cooling and drying, and yet the white are taken to exceed the red in both theſe properties, but are ſeldom uſed inwardly in medicine. The bitterneſs in the roſes when they are freſh, eſpecially the juice, purgeth choler and watery humours; but, being dried, and that heat which cauſed the bitterneſs being conſumed, they have then a binding quality; thoſe alſo that are not full blown do both cool and bind more than thoſe that are full blown, and the white roſes more than the red. The decoction of red roſes, made with wine, and uſed, is very good for the head-ach, and pains in the eyes, ears, throat, and gums, as alſo for the fundament, the lower bowels, and the matrix. The ſame decoction, with the roſes remaining in it, is profitably applied to the region of the heart to eaſe the inflammation therein; as alſo St. Anthony's fire, and other diſeaſes of the ſtomach. Being dried and beaten to powder, and taken into ſteeled wine or water, it helpeth to ſtay women's courſes. The yellow threads in the middle of the red roſes (which are erroneouſly called the roſe ſeed), being powdered, and drunk, in the diſtilled water of quinces, ſtayeth the defluxion of the rheum upon the gums and teeth, preſerving them from corruption, and faſteneth them if they be looſe, being waſhed and gargled therewith, and ſome vinegar of ſquills added thereto. The heads, with the ſeed, being uſed in powder, or in a decoction, ſtay the laſk and ſpitting of blood. Red roſes do ſtrengthen the heart, ſtomach, and liver, and the retentive faculty; they mitigate the pains that ariſe from heat, aſſuage inflammations, procure reſt and ſleep, ſtay running of the reins and fluxes of the belly; the juice of them doth purge and cleanſe the body from choler and phlegm. The huſks of the roſes, with the beards and nails, are binding and cooling, and the diſtilled water of either of them is good for heat and redneſs in the eyes, and to ſtay and dry up the rheums and watering of them. Of the red roſes are uſually made many compoſitions, all ſerving to ſundry good uſes, viz. electuary of roſes; conſerve, both moiſt and dry, which is more uſually called ſugar of roſes; ſyrup of dried roſes, and honey of roſes; the cordial powder called *diarrhodon abbatis* and *aromaticum roſarum*; the diſtilled water of roſes, vinegar of roſes, ointment and oil of roſes, and the roſe-leaves dried, which, although no compoſition, is yet of very great uſe and effect. The electuary is purging, whereof two or three drachms taken by itſelf in ſome convenient liquor is a purge ſufficient for a weak conſtitution; but may be increaſed to ſix drachms, according to the ſtrength of the patient. It purgeth choler without trouble, and is good in hot fevers, and pains of the head ariſing from hot choleric humours and heat in the eyes, the jaundice alſo, and joint-achs proceeding of hot humours. The moiſt conſerve is of much uſe, both binding and cordial; for, until it be about two years old, it is more binding than cordial, and after that more cordial than binding: ſome of the younger conſerve, taken with *mithridatum*, mixed together, is good for thoſe that are troubled with diſtillations of rheums from the brain to the noſe, and defluxions of rheums into the eyes, as alſo for fluxes and laſks of the belly; and, being mixed with the powder of maſtic, is very good for the running of the reins, and for the looſeneſs of humours in the body. The old conſerve, mixed with *aromaticum roſarum*, is a very good cordial againſt faintings, ſwoonings, weakneſs, and tremblings of the heart, ſtrengthening both it and a weak ſtomach, helpeth digeſtion, ſtayeth caſting, and is a very good preſervative in the time of infection. The dry conſerve, which is called ſugar of roſes, is a very good cordial to ſtrengthen the heart and ſpirits, as alſo ſtay defluxions. The ſyrup of dried red roſes ſtrengtheneth a ſtomach given to caſting, cooleth an over-heated liver, comforteth the heart, reſiſteth putrefaction and infection, and helpeth to ſtay laſks and fluxes. Honey of roſes is much uſed in gargles and lotions, to waſh ſores, either in the mouth, throat, or other parts, both to heal them and to ſtay the fluxes of humours falling upon them: it is alſo uſed in clyſters. The cordial powders, called *diarrhodon abbatis* and *aromaticum roſarum*, do comfort and ſtrengthen the heart and ſtomach, procure an appetite, help digeſtion, ſtop vomiting, and are very good for thoſe that have ſlippery bowels, to ſtrengthen them and to dry up their moiſture. Red-roſe water is of well-known and familiar uſe in all occaſions, (and better than damaſk-roſe water.) being cooling and cordial, quickening the weak and faint ſpirits, uſed either in meats or broths, to waſh the temples, to ſmell to at the noſe, or to ſmell the ſweet vapours thereof out of a perfuming pot, or caſt on a hot fire-ſhovel; it is alſo of good uſe againſt the redneſs and inflammations of the eyes, to bathe them therewith, and the temples of the head alſo againſt pain and ach, for which purpoſe alſo vinegar of roſes is of great ſervice, and to procure reſt and ſleep, if ſome thereof and roſe water together be uſed to ſmell to, or the noſe and temples moiſtened therewith, but more uſually to moiſten a piece of red-roſe cake cut for the purpoſe, and heated between a double-folded cloth, with a little beaten nutmeg, and poppy-ſeed ſtrewed on the ſide that muſt lie next to the forehead and temples, and bound thereto all night. The ointment of roſes is much uſed againſt heat and inflammations in the head, to anoint the forehead and temples, and, being mixed with *unguentum populeon*, to procure reſt; it is alſo uſed for the heat of the liver, of the back and reins, and to cool and heal puſhes, wheals, and other red pimples riſing in the face or other parts. Oil of roſes is not only uſed by itſelf to cool any hot ſwellings or inflammations, and to bind and ſtay fluxes of humours unto ſores, but is alſo put into ointments and plaiſters that are cooling and binding, to reſtrain the flux of humours. The dried leaves of the red roſes are uſed both inwardly and outwardly, being cooling, binding, and cordial; for with them are made both *aromaticum roſarum*, *diarrhodon abbatis*, and *ſaccharum roſarum*, each of whoſe properties are before declared. Roſe-leaves and mint, heated, and applied outwardly to the ſtomach, ſtay caſtings, and very much ſtrengthen a weak ſtomach; and, applied as a fomentation to the region of the liver and heart, do much cool and temper them, and alſo ſerve inſtead of a roſe cake, to quiet the over-hot ſpirits and cauſe reſt and ſleep. The ſyrup of damaſk-roſes is both ſimple and compound, and made with agaric. The ſimple ſolutive ſyrup is a familiar, ſafe, gentle, and eaſy, medicine, purging choler, taken from one ounce to three or four; yet this is remarkable herein, that the diſtilled water of this ſyrup ſhould notably bind the belly. The ſyrup with agaric is more ſtrong and effectual, for one ounce thereof by itſelf will open the body more than the other, and worketh as much on phlegm as choler. The compound ſyrup is more forcible in working on melancholy humours, and againſt the leproſy, itch, tetters, &c. and the French diſeaſe. Alſo honey of roſes ſolutive is made of the ſame infuſions that the ſyrup is made of, and therefore worketh the ſame effect both opening and purging, but is oftener given to phlegmatic than choleric perſons, and is more uſed in clyſters than in potions, as the ſyrup made with ſugar is. The conſerve and preſerved leaves of theſe roſes are alſo operative in gently opening the belly.

The ſimple water of the damaſk roſes is chiefly uſed for fumes to ſweeten things, as the dried leaves thereof to make ſweet powders and fill ſweet bags. The wild roſes are few or none of them uſed in phyſic, but yet are generally held to come near the nature of the manured roſes. The fruit of the wild brier, which are called hops, being thoroughly ripe, and made into a conſerve with ſugar, beſides the pleaſantneſs of the taſte, doth gently bind the belly, and ſtay defluxions from the head upon the ſtomach, drying up the moiſture thereof, and helpeth digeſtion. The brier-ball is often uſed, being made into powder and drunk, to break the ſtone, provoke urine when it is ſtopped, and to eaſe and help the cholic. In the middle of theſe balls are often found certain white worms, which, being dried, and made into powder, and ſome of it drunk, is found, by experience of many, to kill and void the worms of the belly.

## ROSA SOLIS, OR SUN-DEW.

Description. It hath divers ſmall round hollow leaves ſomewhat greeniſh, but full of certain red hairs, which makes them ſeem red, every one ſtanding upon his own footſtalks, reddiſh hairy likewiſe. The leaves are continually moiſt in the hotteſt day, for the hotter the ſun ſhines on them the moiſter they are, with a certain ſlimineſs, the ſmall hairs always holding this moiſture. Among theſe leaves riſe up ſmall ſlender ſtalks, reddiſh alſo, three or four fingers high, bearing divers ſmall white knobs one above another, which are the flowers; after which, in the heads, are contained ſmall ſeeds: the root is a few ſmall hairs.

Place. It groweth uſually in bogs and in wet places, and ſometimes in moiſt woods and meadows.

Time. It flowereth in June, and then the leaves are fitteſt to be gathered.

Government and Virtues. The Sun rules it, and it is under the ſign Cancer. Roſa ſolis is accounted good to help thoſe that have ſalt rheum diſtilling on their lungs, which breedeth a conſumption, and therefore the diſtilled water thereof in wine is held fit and profitable for ſuch to drink, which water will be of a gold yellow colour: the ſame water is held to be good for all other diſeaſes of the lungs; as phthiſics, wheeſing, ſhortneſs of breath, or the cough; as alſo to heal the ulcers that happen in the lungs, and it comforteth the heart and fainting ſpirits; the leaves outwardly applied to the ſkin will raiſe bliſters, which hath cauſed ſome to think it dangerous to be taken inwardly. There is a uſual drink made hereof, with *aqua vitæ* and ſpices, frequently, and without any offence or danger, but to good purpoſe, uſed in qualms and paſſions of the heart.

## ROSEMARY.

OUR garden roſemary is ſo well known, that I need not deſcribe it.

TIME. It flowereth in April and May with us, and ſometimes again in Auguſt.

GOVERNMENT AND VIRTUES. The Sun claims privilege in it, and it is under the cœleſtial Ram. It is an herb of as great uſe with us as any whatſoever, not only for phyſical, but civil, purpoſes. The phyſical uſe of it (being my preſent taſk) is very much both for inward and outward diſeaſes; for, by the warming and comforting heat hereof, it helpeth all cold diſeaſes, both of the head, ſtomach, liver, and belly. The decoction thereof in wine helpeth the cold diſtillations of rheum into the eyes, and all other cold diſeaſes of the head and brain, as the giddineſs or ſwimming therein, drowſineſs, or dulneſs of the mind and ſenſes, the dumb palſy, or loſs of ſpeech, the lethargy, and falling-ſickneſs, to be both drunk and the temples bathed therewith. It helpeth the pains in the gums and teeth, by rheum falling into them, or, by putrefaction, cauſing an evil ſmell from them, or a ſtinking breath. It helpeth a weak memory and quickeneth the ſenſes. It is very comfortable to the ſtomach in all the cold griefs thereof, helping digeſtion, the decoction or powder being taken in wine. It is a remedy for wind in the ſtomach or bowels, and expelleth it powerfully, as alſo wind in the ſpleen. It helpeth thoſe that are liver-grown, by opening the obſtructions thereof. It helpeth dim eyes, and procureth a clear ſight, the flowers thereof being taken, all the while it is flowering, every morning faſting, with bread and ſalt. Both Dioſcorides and Galen ſay, that, if a decoction be made thereof with water, and they that have the yellow jaundice do exerciſe their bodies preſently after the taking thereof, it will certainly cure them. The flowers and the conſerve made of them, are good to comfort the heart, and to expel the contagion of the peſtilence; to burn the herb in houſes and chambers, correcteth the air in them. The dried leaves, ſmoked, help thoſe that have a cough, phthiſic, or conſumption, by warming and drying the thin diſtillations which cauſe thoſe diſeaſes. The leaves are much uſed in bathings, and, made into ointments or oils, are good to help cold benumbed joints, ſinews, or members. The chymical oil, drawn from the leaves and flowers, is a ſovereign help for all diſeaſes aforeſaid, touching the temples and noſtrils with two or three drops, for all the diſeaſes of the head and brain ſpoken of before; as alſo to take a drop, two, or three, as the cauſe requireth, for the inward griefs: yet muſt it be done with diſcretion, for it is very quick and piercing, and therefore but a very little muſt be taken at a time. There is alſo another oil made in this manner: take what quantity you will of the flowers, and put them into a ſtrong glaſs cloſe ſtopped, tie a fine linen cloth over the mouth, and turn the mouth down into another ſtrong glaſs, which being ſet in the ſun, an oil will diſtil down into the lower glaſs, to be preſerved as precious for divers uſes, both inward and outward, as a ſovereign balm to heal the diſeaſes before-mentioned, to clear a dim ſight, and to take away ſpots, marks, and ſcars, in the ſkin. This herb is good for a dull and melancholy man to make uſe of; for, if they take the flowers, and make them into powder, and bind them on the right arm in a linen cloth, this powder, by working on the veins, will make a man more merry than ordinary.

## RHUBARB, OR RHAPONTIC.

THOUGH the name may ſpeak it foreign, yet it grows with us in England, and that frequently enough, in our gardens; and is nothing inferior to that which is brought us out of China; take therefore a deſcription at large of it as followeth.

Description. At the firſt appearing out of the ground, when the winter is paſt, it hath a great round browniſh head, riſing from the middle or ſides of the root, which openeth itſelf into ſundry leaves one after another, very much crumpled or folded together at the firſt, and browniſh; but afterwards it ſpreadeth itſelf, and becometh ſmooth, very large, and almoſt round, every one ſtanding on a browniſh ſtalk, of the thickneſs of a man's thumb when they are grown to their fulneſs, and moſt of them two feet and more in length, eſpecially when they grow in any moiſt or good ground; and the ſtalk of the leaf alſo, from the bottom thereof to the leaf itſelf, is about two feet; the breadth thereof from edge to edge, in the broadeſt place, is alſo two feet; of a ſad or dark green colour, of a fine tart or ſouriſh taſte, much more pleaſant than the garden or wood ſorrel. From amongſt theſe riſeth up ſometimes, but not every year, a ſtrong thick ſtalk, not growing ſo high as the patience, or garden-dock, with ſuch round leaves as grow below, but ſmaller at every joint up to the top, and amongſt the flowers, which are white, ſpreading forth into many branches, and conſiſting of five or ſix ſmall white leaves each, after which come browniſh three-ſquare ſeed, like unto other docks, but larger. The root groweth in time to be very great, with divers large ſpreading branches from it, of a dark-browniſh or reddiſh colour on the outſide, with a pale yellow ſkin under it, which covereth the inner ſubſtance or root; which rind and ſkin being pared away, the root appeareth of ſo freſh and lively a colour, with freſh-coloured veins running through it, that the choiceſt of that rhubarb that is brought us from beyond the ſeas cannot excel it: which root, if it be dried carefully, and as it ought, (which muſt be in our country by the gentle heat of a fire, in regard the ſun is not hot enough here to do it,) and every piece kept from touching one another, will hold its colour almoſt as well as when it is freſh; and hath been approved of, and commended, by thoſe who have oftentimes uſed it.

Place. It groweth in gardens, and flowereth about the beginning or middle of June, and the ſeed is ripe in July.

Time. The roots that are to be dried and kept all the year following, are not to be taken up before the ſtalk and leaves be quite withered and gone, and that is not until the middle or end of October; and, if they be taken a little before the leaves do ſpring, or when they are ſprung up, the roots will not have ſo good a colour in them.

## GARDEN PATIENCE, or MONK's RHUBARB.

Description. THIS is a dock, bearing the name of rhubarb for ſome purging quality therein, and groweth up with large tall ſtalks, ſet with ſomewhat broad and long fair-green leaves, not dented. The tops of the ſtalks, being divided into many ſmall branches, bear reddiſh or purpliſh flowers, and three-ſquare ſeed, like unto other docks. The root is long, great, and yellow, like unto the wild docks, but a little redder, and, if it be a little dried, ſheweth leſs diſcoloured veins than the next doth when it is dry.

## GREAT ROUND-LEAVED DOCK, or BASTARD-RHUBARB.

Description. THIS hath divers large, round, thin, yellowiſh-green, leaves, riſing from the root, a little waved above the edges, every one ſtanding on a thick and long browniſh footſtalk; from among which riſeth up a pretty big ſtalk, about two feet high, with ſome ſuch-like leaves growing thereon, but ſmaller; at the top whereof ſtand, in a long ſpike, many ſmall browniſh flowers, which turn into hard three-ſquare ſhining brown ſeed, like the garden patience before deſcribed. This root grows larger, with many branches of great fibres, yellow on the outſide, and ſomewhat pale yellow within, with ſome diſcoloured veins, like the rhubarb firſt deſcribed, but much leſs, eſpecially when it is dry.

Place and Time. Theſe alſo grow in gardens; they flower in June, and the ſeed is ripe in July.

Government and Virtues. Mars claims predominancy over all the wholeſome herbs: a drachm of the dried root of monk's rhubarb, with a ſcruple of ginger, made into powder and taken faſting in a draught or meſs of warm broth, purgeth choler and phlegm downwards, very gently and ſafely, without danger: the ſeed thereof, contrarily, doth bind the belly, and helpeth to ſtay any ſort of laſk or bloody flux. The diſtilled water thereof is very profitably uſed to heal ſcabs, as alſo foul ulcerous ſores, and to allay the inflammation of them. The juice of the leaves or roots, or the decoction of them in vinegar, is uſed as a moſt effectual remedy to heal ſcabs and running ſores.

The baſtard-rhubarb hath all the properties of the monks rhubarb, but is more effectual for both inward and outward diſeaſes. The decoction thereof, with vinegar, dropped into the ears, taketh away the pains; gargled in the mouth, taketh away the tooth-ach; and, being drunk, cureth the jaundice. The ſeed thereof eaſeth the gnawing and griping pains of the ſtomach, and taketh away loathing. The root thereof helpeth the ruggedneſs of the nails, and, being boiled in wine, helpeth the ſwelling of the throat, commonly called the king's evil, as alſo the ſwellings of the kernels of the ears. It helpeth them that are troubled with the ſtone, provoketh urine, and helpeth the dimneſs of the ſight. The roots of this baſtard rhubarb are uſed in opening and purging diet-drinks with other things to open the liver, and to cleanſe and cool the blood.

The properties of that which is called the Engliſh rhubarb are the ſame with the former, but much more effectual, and hath all the properties of the true Indian rhubarb, except the force in purging, wherein it is but of half the ſtrength thereof, and therefore a double quantity muſt be uſed: it likewiſe hath not that bitterneſs and aſtriction; in other things it worketh almoſt in an equal quality, which are theſe: it purgeth the body of choler and phlegm, being either taken of itſelf, made into powder and drunk in a draught of white wine, or ſteeped therein all night, and taken faſting, or put among other purges, as ſhall be thought convenient, cleanſing the ſtomach, liver, and blood, opening obſtructions, and helping thoſe griefs that come thereof; as the jaundice, dropſy, ſwelling of the ſpleen, tertian and day agues, and pricking pains in the ſides; and it alſo ſtayeth ſpitting of blood. The powder taken with caſſia diſſolved, and a little venice turpentine, cleanſeth the reins, and ſtrengtheneth them, and is very effectual to ſtay the running of the reins. It is alſo given for the pains and ſwellings in the head, for thoſe that are troubled with melancholy, and helpeth the gout and cramp. The powder of rhubarb, taken with a little mummia and madder-roots, in ſome red wine, diſſolveth clotted blood in the body, happening by any fall or bruiſe, and healeth burſtings and broken parts as well inward as outward; the oil, likewiſe, wherein it hath been boiled, worketh the like effects; it is uſed to heal thoſe ulcers that happen in the eyes and eye-lids, being ſteeped and ſtrained; as alſo to aſſuage ſwellings and inflammations; and, applied with honey, or boiled in wine, it taketh away all black and blue ſpots or marks. Whey or white wine are the beſt liquors to ſteep it in, and thereby it worketh more effectually in opening obſtructions, and purging the ſtomach and liver.

## MEADOW RUE.

Description. MEADOW RUE riſeth up with a yellow ſtringy root, much ſpreading in the ground, and ſhooting forth new ſprouts round about, with many herby green ſtalks, two feet high, creſted, ſet with joints here and there, and many large leaves on them below, being divided into ſmaller leaves, nicked or dented in the fore part, of a ſad green colour on the upper ſide, and pale green underneath. Towards the top of the ſtalk there ſhooteth forth divers ſhort branches, on every one whereof there ſtand two, three, or four, ſmall round heads or buttons, which breaking, the ſkin that incloſeth them ſhows forth a tuft of pale greeniſh-yellow threads; which falling away, there come in their places ſmall three-cornered cods, wherein is contained ſmall, long, and round, ſeed. The plant hath a ſtrong unpleaſant ſmell.

Place. It groweth in many places in England, in the borders of moiſt meadows, and by ditch ſides.

Time. It flowereth about July, or the beginning of Auguſt.

Government and Virtues. Dioſcorides ſaith, that this herb, bruiſed and applied, perfectly healeth old ſores: and the diſtilled water of the herb and flowers doth the like. It is uſed by ſome, among other pot-herbs, to open the body; but the roots waſhed clean, boiled in ale, and drunk, are more opening than the leaves. The root, boiled in water, and the places of the body moſt troubled with vermin or lice waſhed therewith, while it is warm, deſtroyeth them utterly. In Italy it is uſed againſt the plague, and in Saxony againſt the jaundice. Pliny writeth, that there is ſuch friendſhip between it and the fig-tree, that it proſpereth no where ſo well as under that tree, and delighteth to grow in ſunny places. It is an enemy to the toad, as being a great enemy to poiſon. The ancient aſtrologers declare this herb hath a property of making a man chaſte; but a woman it fills with luſt.

## GARDEN RUE.

GARDEN RUE is ſo well known, both by this name and the name Herb of Grace, that I ſhall not write any deſcription of it, but ſhall only ſhew the virtues of it as followeth:

Government and Virtues. It is an herb of the Sun, and under Leo. It provoketh urine, being taken either in meat or drink. The ſeed thereof, taken in wine, is an antidote againſt all dangerous medicines or deadly poiſons. The leaves taken either by themſelves, or with figs and walnuts, is called Mithridates's counter-poiſon againſt the plague, and cauſeth all venomous things to become harmleſs. Being often taken in meat or drink, it abateth venery, and deſtroyeth the ability to beget children. A decoction made thereof, with ſome dried dill leaves and flowers, eaſeth all pains, inwardly drunk, and outwardly applied warm to the place grieved. The ſame, being drunk, helpeth the pains both of the cheſt and ſides, as alſo coughs and hardneſs of breathing, the inflammation of the lungs, and the tormenting pains of the ſciatica and of the joints, being anointed or laid to the places, as alſo the ſhaking fits of agues by taking a draught before the fit. Being boiled or infuſed in oil, it is good to help the wind cholic; it killeth and driveth forth the worms of the belly, if it be drunk after it is boiled in wine to the half with a little honey. It helpeth the gout or pains in the joints of hands, feet, or knees, applied thereunto: and with figs it helpeth the dropſy, being bathed therewith; being bruiſed, and put into the noſtrils, it ſtayeth the bleeding thereof. It taketh away wheals and pimples, if, being bruiſed with a few myrtle leaves, it be made up with wax and applied. It cureth the morphew, and taketh away all ſorts of warts, if boiled in wine with ſome pepper and nitre, and the places rubbed therewith; and, with alum and honey, helpeth the dry ſcab, or any tetter or ring-worm. The juice thereof, warmed in a pomegranate ſhell or rind, and dropped into the ears, helpeth the pains of them. The juice of it and fennel, with a little honey, and the gall of a cock put thereto, helpeth the dimneſs of the eye-ſight. An ointment made of the juice thereof, with oil of roſes, ceruſs, and a little vinegar, cureth St. Anthony's fire, and all foul running ſores in the head; and the ſtinking ulcers of other parts. The antidote uſed by Mithridates every morning faſting to ſecure himſelf from any poiſon or infection was this: Take twenty leaves beaten together into a maſs with twenty juniper berries, which is the quantity appointed for every day. Another electuary is made thus: Take of nitre, pepper, and cummin ſeed, of each equal parts; of the leaves of rue, clean picked, as much in weight as all the other three; beat them well together, and put to it as much honey as will make it into an electuary; (but you muſt firſt ſteep your cummin-feed in vinegar twenty-four hours, and then dry it, or rather toaſt it in a hot fire-ſhovel, or in an oven;) and it is a remedy for the pains or griefs of the cheſt or ſtomach, of the ſpleen, belly, or ſides; of the liver, by obſtructions; of the reins and bladder, by the ſtopping of urine.

## RUPTURE-WORT.

Description. THIS ſpreadeth very many ſmall branches round about upon the ground, about a ſpan long, divided into many parts, full of ſmall joints ſet very thick together, whereat come forth two very ſmall leaves of a yellowiſh green colour, branches and all, where groweth forth alſo a number of exceeding ſmall yellowiſh flowers, ſcarce to be diſcerned from the ſtalks and leaves, which turn into ſeeds as ſmall as the very duſt. The root is very long and ſmall, thruſting down deep into the ground. This hath no ſmell nor taſte at firſt, but afterwards hath a little aſtringent taſte, without any manifeſt heat, yet a little bitter and ſharp.

Place. It groweth in dry, ſandy, rocky, places.

Time. It is freſh and green all the ſummer.

Government and Virtues. This herb is under the dominion of Saturn. Rupture-wort hath not its name in vain, for it is found by experience to cure the rupture, not only in children, but alſo in grown perſons, if the diſeaſe be not too inveterate, by taking a drachm of the powder of the dried herb every day in wine, or the decoction made in wine and drunk, or the juice or diſtilled water of the green herb taken in the ſame manner; and helpeth all other fluxes either in men or women; vomitings alſo, and the gonorrhea, or running of the reins, being taken any of the ways aforeſaid. It doth alſo moſt aſſuredly help thoſe that have the ſtranguary, or are troubled with the ſtone or gravel. The ſame alſo much helpeth all ſtitches in the ſide, all griping pains in the ſtomach or belly, the obſtructions of the liver, and cureth the yellow jaundice likewiſe. It killeth alſo the worms in children; being outwardly applied, it heals wounds, and helps defluxions of rheum from the head to the eyes, noſe, and teeth, being bruiſed green and bound thereto. It alſo drieth up the moiſture of fiſtulous ulcers, or any other that are foul and ſpreading.

## RUSHES.

ALTHOUGH there are many kinds of ruſhes, yet I ſhall confine myſelf to thoſe which are beſt known, and moſt medicinal, as the bull-ruſhes, and other of the ſoft and ſmooth kinds; which grow ſo commonly in almoſt every place in Great

Britain, and are ſo generally noted, that it is needleſs to write any deſcription of them. Briefly then take the virtues of them, as followeth:

Government and Virtues. The ſeeds of theſe ſoft ruſhes, ſay Dioſcorides and Galen, toaſted, and drunk in wine and water, ſtay the laſk and the courſes, when they come down too abundantly; but it cauſeth head-ach. It likewiſe provoketh ſleep, but muſt be given with caution. Pliny ſaith, the root, boiled in water to the conſumption of one third, helpeth the cough.

## RYE.

Government and Virtues. RYE is more digeſting than wheat. The bread and the leaven thereof ripeneth and breaketh impoſthumes, biles, and other ſwellings: the meal of rye, put between a double cloth, moiſtened with a little vinegar, and heated in a pewter diſh, and bound faſt to the head while it is hot, doth much eaſe the continual pains of the head. Mathiolus ſaith, that the aſhes of rye-ſtraw, put into water, and ſuffered therein a day and a night, will heal the chops of the hands or feet.

## RICE.

Description. THIS grain, or corn, riſeth up with a ſtronger ſtalk than wheat, about a yard high, with ſundry joints, and a large thick leaf at each of them, like the reed; at the top it beareth a ſpiked tuft ſpread into branches, whoſe blooming is ſaid to be purpliſh, with the ſeed ſtanding ſeverally on them incloſed in a hard brown ſtraked huſk, and an arm at the head of every one of them; which, being hulled, is very white, of the bigneſs almoſt of wheat-corns blunt at both ends.

Names. Rice is called in Latin *oriza*, and the Italians call it *rizo*, the French *ris*.

Place and Time. This grain originally was brought out of the Eaſt Indies, where in many places it yieldeth two crops in a year, being the chiefeſt corn they live upon, and not with them only, but through all Æthiopia and Africa; and thence hath been brought into Syria, Egypt, Italy, &c. It delighteth to grow in moiſt grounds, and is ripe about the middle of autumn.

Government and Virtues. It is a ſolar grain. The phyſical uſe thereof is chiefly to ſtay the laſks and fluxes of the ſtomach and belly, eſpecially if it be a little parched before it be uſed, and ſteel quenched in the milk wherein it is boiled, being ſomewhat binding and drying; it is thought alſo to increaſe ſeed, being boiled in milk, and ſome ſugar and cinnamon put thereto; the flower of rice is of the ſame property, and is ſometimes alſo put into cataplaſms that are applied to repel humours from flowing or falling to the place, and is alſo conveniently applied to women's breaſts, to ſtay inflammations therein.

## SWEET OR AROMATICAL REED.

Kinds and Names. THERE is one ſort called *calamus aromaticus Mathioli*, Mathiolus's aromatical reed; a ſecond called *calamus aromaticus Syriacus vel Arabicus ſuppoſitivus*, the ſuppoſed Syrian or Arabian aromatical reed; and the third, the true *acorus* of Dioſcorides, or ſweet-ſmelling reed, called in ſhops *calamus aromaticus*, and likewiſe *acorus verus, ſive calamus officinarum.*

Description. 1. Mathiolus's aromatical reed. This groweth with an upright tall ſtalk, ſet full of joints at certain ſpaces up to the top, (not hollow, but ſtuffed full of a white ſpongeous pith, of a gummy taſte, ſomewhat bitter, and of the bigneſs of a man's finger,) and at every one of them a long narrow leaf, of a dark-green colour, ſmelling very ſweet, differing therein from all other kinds of reeds; on the tops whereof groweth a buſhy or feather-like panicle, reſembling thoſe of the common reed. The root is knobby, with divers heads thereat, whereby it increaſeth and ſhooteth forth new heads of leaves, ſmelling alſo very ſweet, having a little binding taſte, and ſharp withal.

2. The ſuppoſed Syrian or Arabian aromatical reed riſeth up from a thick root three or four inches long, big at the head, and ſmall at the bottom, with one ſtalk, ſometimes more, two cubits high, being ſtraight, round, ſmooth, and eaſy to break into ſplinters; full of joints, and about a finger's thickneſs, hollow and ſpungy within, of a whitiſh yellow colour; the ſtalk is divided into other branches, and they again into other ſmaller ones, two uſually ſet together at a joint, with two leaves under them likewiſe, very like unto the leaves of lyſimachia, the willow-herb, or looſeſtrife, but leſs, being an inch and an half long; compaſſing the ſtalk at the bottom, with ſundry veins running all the length of them; from the joints riſe long ſtalks, bearing ſundry ſmall yellow flowers, made of leaves like alſo unto lyſimachia, with a ſmall pointel in the middle, after which follow ſmall blackiſh long heads or ſeed-veſſels, pointed at the end, and having in them ſmall blackiſh ſeed: the ſtalk hath little or no ſcent, yet not unpleaſant, as Alpinus ſaith, being bitter, with a little acrimony therein; but Bauhinus ſaith, it is of an aromatical taſte, and very bitter.

3. The ſweet-ſmelling reed, or *calamus officinarum*, or *acorus verus*, hath many flags, long and narrow freſh green leaves, two feet long, or more; yet oftentimes ſomewhat browniſh at the bottom, the one riſing or growing out of the ſide of the other,

in the ſame manner that other flags or flower-de-luces grow, which are thin on both ſides, and rigid or thickeſt in the middle; the longeſt, for the moſt part, ſtanding in the midſt, and ſome of them as it were curled or plaited towards the ends or tops of them; ſmelling very ſweet, as well when they are green and freſh as when they are dried and kept a long time; which do ſo abide in a garden a long time, as though it never did nor never would bear flower; the leaves every year drying down to the ground, and ſhooting out freſh every ſpring; but, after three or four years abiding in a place, it ſhooteth forth a narrow long leaf by itſelf, flat like unto the other leaves, eſpecially from the middle upwards; but from the bottom to the middle it is flat, at which place cometh forth one long round head, very ſeldom two, in form and bigneſs like unto the catkin or aglet of the haſel-nut tree, growing upright, and of the length and thickneſs of one's finger, or rather bigger; ſet with ſeveral ſmall lines or diviſions, like unto a green pine-apple; of a purpliſh green colour for the moſt part; out of which bunches ſhoot forth ſmall pale whitiſh flowers, conſiſting of four ſmall leaves a-piece, without ſo good a ſcent as the leaves, falling quickly away, and not yielding any ſeed. The root is thick and long, lying under the ſurface of the ground, ſhooting forward, and with ſmall roots or ſuckers on all ſides, like unto the garden valerian, whitiſh on the outſide, or greeniſh if it lie above the ground, and more pale or whitiſh on the inſide, with many joints thereabouts, and whereat it hath or doth ſhoot forth long thick fibres underneath, whereby it taketh ſtrong hold in the ground.

Place and Time. The firſt is ſaid by Mathiolus, and others, to grow in India, Syria, and Judæa; the dry ſtalks of the ſecond are ſaid to grow at the foot of Mount Libanus, in Syria, not far from Tripoli, in the wet grounds there; the third in ſundry moiſt places in Egypt, and by the lake Genneſareth in Judæa, and in divers places of Syria and Arabia.

The other *calamus* of the ſhops, or true *acorus*, groweth in many places of Turkey in moiſt grounds, whence the largeſt roots, the firmeſt, whiteſt, and ſweeteſt, are brought unto us; it groweth alſo in Ruſſia and thereabouts, in great plenty. It is ſometimes found in moiſt grounds in Yorkſhire, and the northern parts of England.

Government and Virtues. Theſe reeds are under the dominion of Venus, of a temperate quality. The *calamus* of Dioſcorides, he ſaith, hath theſe properties: it provoketh urine, and, boiled with graſs-roots and ſmallage, it helpeth thoſe that have the dropſy; it fortifieth the reins, and is good againſt the ſtranguary, and is alſo profitable for thoſe that have the rupture; the fumes of it, taken through a tobaccobacco-pipe, either by itſelf or with ſome dried turpentine, cure a cough; it is put into baths for women to ſit in; alſo in clyſters to eaſe pains.

It is uſed in mollifying oils and plaiſters, that ſerve to ripen hard impoſthumes, as alſo for the ſweet ſcent thereof. Galen ſaith, it being of a temperature moderate, between heat and cold, and ſomewhat aſtringent, and having a very little acrimony, it is profitably uſed among other things that help the liver and ſtomach, doth provoke urine, is uſed with other things in fomentations for inflammations, and gently to move the courſes. Dioſcorides ſaith, that the ſweet flag is good to provoke urine, if the decoction thereof be drunk. It helpeth to eaſe pains in the ſides, liver, and breaſt, as alſo to eaſe the griping pains of the cholic and cramp, and is good againſt ruptures; it waſtes the ſpleen, helps the ſtranguary, and bitings of venomous creatures. It is alſo good in baths for women to ſit in, for diſtempers of the womb. The juice dropped into the eyes, drieth rheums therein, and cleareth the ſight, taking away all films that may hurt them.

The root is of much uſe in all antidotes againſt poiſon or infection; it is a good remedy againſt a ſtinking breath, to take the root faſting every morning for ſome time together. The hot fumes of the decoction made in water, and taken in at the mouth through a funnel, are good to help thoſe that are troubled with a cough. A drachm of the powder of the roots, with as much cinnamon, taken in a draught of wormwood wine, is good to comfort and ſtrengthen a cold weak ſtomach: the decoction thereof is good againſt convulſions or cramps, and for falls and inward bruiſes. An oxymel or ſyrup made hereof in this manner is effectual for all cold ſpleens and livers: Take of the roots of *acorus*, one pound; waſh and pick them clean, then bruiſe them, and ſteep them for three days in vinegar, after which time let them be boiled together to the conſumption of the one half of the vinegar, which being ſtrained, ſet to the fire again, putting thereto as much honey as is ſufficient to make it into a ſyrup; an ounce of this ſyrup in the morning, in a ſmall draught of the decoction of the ſame roots, is ſufficient for a doſe; the whole roots, preſerved either in honey or ſugar, are effectual for the ſame purpoſes; but the green roots, preſerved, are better than the dried roots, which are firſt ſteeped and then preſerved. It likewiſe mollifieth hard tumours in any part of the body.

## SAFFRON.

THE herb needs no deſcription, it being known generally where it grows.

Place. It grows frequently at Walden in Eſſex, and in Cambridgeſhire.

Government and Virtues. It is an herb of the Sun, and under the Lion, and therefore ſtrengthens the heart exceedingly. Let not above ten grains be given at one time, for, being taken in an immoderate quantity, it may hurt the heart inſtead of helping it. It quickeneth the brain, for the ſun is exalted in Aries, as well as he hath his houſe in Leo; it helpeth the conſumption of the lungs and difficulty of breathing: it is an excellent thing in epidemical diſeaſes, as peſtilence, ſmall-pox, and meaſles. It is a notable expulſive medicine, and remedy for the yellow jaundice. My own opinion is, that hermodactils are nothing elſe but the roots of ſaffron dried; and my reaſon is, that the roots of all crocus, both white and yellow, purge phlegm as hermodactils do; and, if you dry the roots of any crocus, neither your eyes nor your taſte ſhall diſtinguiſh them from hermodactils.

## SAGE*.

OUR ordinary garden ſage is ſo well known by every inhabitant of this kingdom, that it needeth no deſcription.

TIME. It flowereth in or about June, July, and Auguſt.

GOVERNMENT AND VIRTUES. Jupiter claims this, and it is good for the liver, and to breed good blood. A decoction of the leaves and branches of ſage, ſaith Dioſcorides, provoketh urine, bringeth down women's courſes, helpeth to expel the dead child, and cauſeth the hair to become black; it ſtayeth the bleeding of wounds, and cleanſeth foul ulcers or ſores. Orpheus ſaith, three ſpoonfuls of the juice of ſage taken faſting, with a little honey, doth preſently ſtay the ſpitting or caſting up of blood. For them that are in a conſumption theſe pills are much commended: Take of ſpikenard and ginger each two drachms; of the ſeed of ſage, toaſted at the fire, eight drachms; of long pepper twelve drachms; all theſe being brought into fine powder, put thereto ſo much juice of ſage as may make them into a maſs for pills, taking a drachm of them every morning faſting, and ſo likewiſe at night, drinking a little pure water after them. Mathiolus ſaith, it is very profitable for all manner of pains of the head, coming of cold and rheumatic humours, as alſo for pains of the joints, whether inward or outward, and therefore helpeth the falling-ſickneſs, the lethargy, ſuch as are dull and heavy of ſpirit, the palſy, and is of much uſe in all defluxions of rheum from the head, and for the diſeaſes of the cheſt or breaſt. The leaves of ſage and nettles, bruiſed together, and laid upon the impoſthume that riſeth behind the ears, do aſſuage it much. The juice of ſage, taken in warm water, helpeth a hoarſeneſs and cough. The leaves ſodden in wine, and laid upon the place affected with the palſy, helpeth much, if the decoction be drunk alſo. Sage taken with wormwood is good for the bloody flux: Pliny ſaith, it helpeth the ſtinging and biting of ſerpents, killeth worms that breed in the ears and in ſores. Sage is of excellent uſe to help the memory, warming and quickening the ſenſes; and the conſerve made of the flowers is uſed to the ſame purpoſe, and alſo for all the former recited diſeaſes. The juice of ſage drunk with vinegar hath been of good uſe againſt the plague at all times. Gargles are likewiſe made with ſage, roſemary, honey-ſuckles, and plantane, boiled in wine or water, with ſome honey or alum put thereto, to waſh ſore mouths and throats. With other hot and comfortable herbs, ſage is boiled to bathe the body and legs in the ſummer-time, eſpecially to warm cold joints or ſinews troubled with the palſy or cramp, and to comfort or ſtrengthen the parts. It is much commended againſt the ſtitch or pains in the ſide coming of wind, if the place be fomented warm with the decoction thereof in wine, and the herb alſo, after the boiling, be laid warm thereto.

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* The occult virtues of ſaffron and ſage are admirably combined in the SOLAR TINCTURE, with all ſolar herbs, antiſcorbutics, purifiers of the blood, &c. &c. whence it is, in all ſcrophulous complaints, an abſolute ſpecific.

## WOOD-SAGE.

Description. WOOD-SAGE riſeth up with ſquare hoary ſtalks two feet high at the leaſt, with two leaves at every joint, ſomewhat like other ſage leaves, but ſmaller, ſofter, whiter, and rounder, and a little dented about the edges, and ſmelling ſomewhat ſtronger; at the ſtops of the ſtalks and branches ſtand the flowers on a ſlender long ſpike, turning themſelves all one way when they blow, and are of a pale and whitiſh colour, ſmaller than ſage, but hooded and gaping like it; the ſeed is blackiſh and round, four uſually ſeen in a huſk together; the root is long and ſtringy, with divers fibres thereat; and it abideth many years.

Place. It groweth in woods, and by wood-ſides, as alſo in divers fields and by-lanes in Great Britain.

Time. It flowereth in June, July, and Auguſt.

Government and Virtues. The herb is under Venus. The decoction of wood-ſage provoketh urine; it alſo provoketh ſweat, digeſteth humours, and diſcuſſeth ſwellings and nodes in the fleſh. The decoction of the green herb made with wine is a ſafe and ſure remedy for thoſe who by falls, bruiſes, or blows, doubt ſome vein to be inwardly broken, to diſperſe and void the congealed blood, and to conſolidate the vein; it is alſo good for ſuch as are inwardly or outwardly burſten, the drink uſed inwardly, and the herb applied outwardly; the ſame, uſed in the ſame manner, is found to be a ſure remedy for the palſy. The juice of the herb, or the powder thereof dried, is good for moiſt ulcers and ſores in the legs or other parts, to dry them, and cauſeth them to heal more ſpeedily. It alſo cureth green wounds.

## SOLOMON's SEAL.

Description. THE common Solomon's ſeal riſeth up with a round ſtalk about half a yard high, bowing or bending down, ſet with ſingle leaves one above another, ſomewhat large, and like the leaves of the lily-convalley, or May-lily, with an eye of bluiſh upon the green, with ſome ribs therein, and more yellowiſh underneath. At the foot of every leaf, almoſt from the bottom up to the top of the ſtalk, come forth ſmall, long, white, and hollow, pendulous flowers, ſomewhat like the flowers of May-lily, but ending in five long points, for the moſt part two together at the end of a long foot-ſtalk, and ſometimes but one, and ſometimes alſo two ſtalks with flowers at the foot of a leaf, which are without any ſcent at all, and ſtand all on one ſide of the ſtalk. After they are paſt, come in their places ſmall round berries, green at firſt, and blackiſh-green, tending to blueneſs, when they are ripe, wherein lie ſmall white hard and ſtoney ſeed. The root is of the thickneſs of one's finger or thumb, white and knobbed in ſome places, with a flat circle repreſenting a ſeal, whence it took the name, lying along under the ſurface of the earth, and not running very low, but with many fibres underneath.

Place. It is frequent in divers places of Kent, Eſſex, and other counties.

Time. It flowereth about May, or the beginning of June; and the root abideth and ſhooteth anew every year.

Government and Virtues. Saturn owns the plant. The root of Solomon's ſeal is found by experience to be available in wounds, hurts, and outward ſores, to heal and cloſe up the lips of thoſe that are green, and to dry up and reſtrain the flux of humours to thoſe that are cold: it is good to ſtay vomitings and bleedings whereſoever, as likewiſe all fluxes in man or woman; alſo to knit any joint, which by weakneſs uſeth to be often out of place, or will not ſtay in long when it is ſet; alſo to knit and join broken bones in any part of the body, the roots being bruiſed and applied to the place; it hath been found by late experience, that the decoction of the root in wine, or the bruiſed root put into wine or other drink, and after a night's infuſion ſtrained off, and drunk, hath relieved both man and beaſt whoſe bones have been broken by any occaſion, which is the moſt aſſured refuge of help to people of all countries that they can have: it is no leſs effectual to help ruptures and burſtings, the decoction in wine, and the powder in broth or drink, being inwardly taken and outwardly applied to the place. The ſame is alſo available for inward or outward bruiſes, falls, or blows, both to diſpel the congealed blood, and to take away the pains and the black-and-blue marks that abide after the hurt. The ſame alſo, or the diſtilled water of the whole plant, uſed to the face or other parts of the ſkin, cleanſeth it from morphew, freckles, ſpots, or marks whatſoever, leaving the place freſh, fair, and lovely, for which purpoſe it is much uſed by the Italian ladies, and is the principal ingredient of moſt of the coſmetics and beauty-waſh advertiſed by perfumers at a high price.

## SAMPHIRE.

Description. ROCK-SAMPHIRE groweth with a tender green ſtalk, about half a yard or two feet at the moſt, branching forth almoſt from the very bottom, and ſtored with ſundry thick, and almoſt round, ſomewhat long, leaves, of a deep-green colour, ſometimes three together, and ſometimes more, on a ſtalk, and are ſappy, and of a pleaſant, hot, or ſpicy, taſte. At the tops of the ſtalk and branches ſtand umbels of white flowers, and after them come large ſeed bigger than fennel-ſeed, yet ſomewhat like. The root is great, white, and long, continuing many years, and is of an hot ſpicy taſte.

Place. It groweth on the rocks that are often moiſtened by the ſea.

Time. It flowereth and ſeedeth in the end of July and Auguſt.

Government and Virtues. It is an herb of Jupiter, and was in former times wont to be uſed more than it now is. It is a ſafe herb, very pleaſant both to the taſte and ſtomach, helping digeſtion, and in ſome ſort opening the obſtructions of the liver and ſpleen, provoking urine, and helping thereby to waſh away the gravel and ſtone.

## SANICLE.

Description. THE ordinary ſanicle ſendeth forth many great round leaves, ſtanding upon long browniſh ſtalks, every one cut or divided into five or ſix parts, and ſome of thoſe alſo cut in, ſomewhat like the leaf of a crow-foot or dove's-foot, finely dented about the edges, ſmooth, and a dark-green ſhining colour, and ſometimes reddiſh about the brims, from among which riſe up ſmall round green ſtalks, without any joint or leaf thereon, except at the top, where it branches forth into flowers, having a leaf divided into three or four parts at that joint with the flowers, which are ſmall and white, ſtarting out of ſmall round greeniſh yellow heads, many ſtanding together in a tuft; in which afterwards are the ſeeds contained, which are ſmall round rough burs, ſomewhat like the ſeeds of clover, and ſtick in the ſame manner upon any thing that they touch. The root is compoſed of many black ſtrings of fibres ſet together at a little long head, which abideth with the green leaves all the winter.

Place. It is found in many ſhady woods, and other places, in England.

Time. It flowereth in June, and the ſeed is ripe ſhortly after.

Government and Virtues. This is one of Venus's herbs. It is exceeding good to heal green wounds, or any ulcers, impoſthumes, or bleedings inwardly. It wonderfully helps thoſe that have any tumours in any part of their bodies, for it repreſſeth and diſſipateth the humours, if the decoction or juice thereof be taken, or the powder in drink, and the juice uſed outwardly; for there is not found any herb that can give ſuch preſent help either to man or beaſt when the diſeaſe falleth upon the lungs or throat, and to heal up all the putrid malignant ulcers in the mouth, throat, and privities, by gargling or waſhing with the decoction of the leaves and root made in water, and a little honey put thereto. It helpeth to ſtay fluxes of blood either by the mouth, urine, or ſtool, and laſks of the belly, the ulceration of the kidneys alſo, and the pains in the bowels, and the gonorrhea or running of the reins, being boiled in wine or water, and drunk: the ſame alſo is no leſs powerful to help any ruptures or burſtings, uſed both inwardly and outwardly; and it is effectual in binding, reſtraining, conſolidating, heating, drying, and healing.

## SARACENS CONSOUND, or SARACENS WOUND-WORT.

Description. THIS groweth very high, ſometimes with browniſh ſtalks, and at other times with green and hollow, to a man's height, having many long and narrow green leaves ſnipped about the edges, ſomewhat like thoſe of the peach-tree, or willow leaves, but not of ſuch a white-green colour: the tops of the ſtalks are furniſhed with many pale yellow ſtar-like flowers ſtanding in green heads, which, when they are fallen, and the ſeed ripe, (which is ſomewhat long, ſmall, and of a yellowiſh-brown colour, wrapped in down,) is therewith carried away by the wind. The root is compoſed of many ſtrings or fibres, ſet together at a head, which periſh not in winter, though the ſtalks dry away. The taſte of this herb is ſtrong and unpleaſant, and ſo is the ſmell. Wonders are related of the virtues of this herb againſt hurts and bruiſes; and it is a great ingredient in the Swiſs arquebuſade-water. It is balſamic and diuretic; and all its occult powers are judiciouſly combined in Dr. Sibly's Solar Tincture: which Medicine no family ſhould ever be without, particularly ſuch as live remote from medical aſſiſtance.

Place. It groweth in moiſt and wet grounds by the ſide of woods, and ſometimes in moiſt places of the ſhady groves, as alſo by the water-ſide.

Time. It flowereth generally about the middle of July, and the ſeed is ſoon ripe, and carried away by the wind.

Government and Virtues. Saturn owns this herb. Among the Germans, this wound-herb is preferred before all others of the ſame quality. Being boiled in wine, and drunk, it helpeth the indiſpoſition of the liver, and freeth the gall from obſtructions, whereby it is good for the yellow jaundice, and for the dropſy in the beginning of it, for all inward ulcers of the reins, or elſewhere, and inward wounds and bruiſes; and, being ſteeped in wine and then diſtilled, the water thereof drunk is of ſingular ſervice to eaſe all gnawings in the ſtomach or other pains of the body, as alſo the pains of the mother; and being boiled in water, it helpeth continual agues; and this ſaid water, or the ſimple water of the herb diſtilled, or the juice or the decoction, are very effectual to heal any green wound, old ſore, or ulcer, cleanſing them from corruption, and quickly healing them up. It is no leſs effectual for the ulcers in the mouth or throat, be they never ſo foul or ſtinking, by waſhing and gargling them therewith. Briefly, whatſoever hath been ſaid of bugle or ſanicle may be found herein.

## SAUCE-ALONE, or JACK-BY-THE-HEDGE.

Description. THE lower leaves of this are rounder than thoſe that grow towards the tops of the ſtalks, and are ſet ſingly, one at a joint, being ſomewhat round and broad, and pointed at the ends, dented alſo about the edges, ſomewhat reſembling nettle leaves for the form, but of a more freſh green-colour, and not rough or pricking: the flowers are very ſmall, and white, growing at the tops of the ſtalks one above another; which being paſt, there follow ſmall and long round pods, wherein are contained ſmall round ſeeds, ſomewhat blackiſh. The root is ſtringy and thready, periſhing every year after it hath given ſeed, and raiſeth itſelf again of its own ſowing. The plant, or any part thereof, being bruiſed, ſmelleth of garlic, but is much more pleaſant, and taſteth ſomewhat hot, ſharp, and biting, almoſt like rocket.

Place. It groweth under walls, and by hedge-ſides, and pathways in fields, in many places.

Time. It flowereth in June, July, and Auguſt.

Government and Virtues. It is an herb of Mercury. This is eaten by many country people as ſauce to their ſalt fiſh, and helpeth to digeſt the crudities and other corrupt humours ingendered thereby; it warmeth the ſtomach, and cauſeth digeſtion. The juice thereof, boiled with honey, is reckoned to be as good as hedge-muſtard for the cough, to cut and expectorate the tough phlegm. The ſeed, bruiſed and boiled in wine, is a good remedy for the wind cholic, or the ſtone, being drunk warm. The leaves alſo or ſeed boiled are good to be uſed in clyſters to eaſe the pains of the ſtone. The green leaves are held to be good to heal ulcers in the legs.

## WINTER AND SUMMER SAVORY.

BOTH theſe are ſo well known, (being conſtant inhabitants in our gardens,) that they need no deſcription.

Government and Virtues. Mercury claims the dominion over this herb. It is a remedy againſt the cholic and iliac paſſion: the ſummer kind is the beſt. They are both of them hot and dry, eſpecially the ſummer kind, which is both ſharp and quick in taſte, expelling wind in the ſtomach and bowels, and is a preſent help for the riſing of the mother procured by wind; provoketh urine, and is much commended for women with child to take inwardly, and to ſmell often to. It cutteth tough phlegm in the cheſt and lungs, and helpeth to expectorate it the more eaſily: quickeneth the dull ſpirits in the lethargy, the juice thereof being ſnuffed or caſt up into the noſtrils. The juice, dropped into the eyes, cleareth a dull ſight, if it proceed of thin cold humours diſtilling from the brain. The juice heated with a little oil of roſes, and dropped into the ears, eaſeth them of the noiſe and ſinging in them, and of deafneſs alſo. Outwardly applied, with flour, in manner of a poultice, it giveth eaſe to the ſciatica, and members having the palſy, heating and warming them; and taketh away their pains. It alſo taketh away the pains that come of ſtinging by bees, waſps, or any venomous reptile.

## SAVIN.

TO deſcribe a plant ſo well known is needleſs, it being almoſt in every garden, and remaining green all the winter.

Government and Virtues. It is under the dominion of Mars, being hot and dry in the third degree; and, being of exceeding clean parts, is of a very digeſting quality: if you dry the herb into powder, and mix it with honey, it is an excellent remedy to cleanſe old filthy ulcers, and fiſtulas; but it hinders them from healing. The ſame is good to break carbuncles and plague ſores; it alſo helpeth the king's evil, being applied to the place: being ſpread upon a piece of leather, and applied to the navel, it kills the worms in the belly; helps ſcabs and the itch, running ſores, cankers, tetters, and ringworms, and, being applied to the place, may happily cure venereal ſores. This I thought proper to mention, as it may ſafely be uſed outwardly; but inwardly it cannot be taken without manifeſt danger, particularly to pregnant women, or thoſe who are ſubject to flooding.

## COMMON WHITE SAXIFRAGE.

Description. THIS hath a few ſmall reddiſh kernels, covered with ſome ſkins lying among divers ſmall blackiſh fibres, which ſend forth ſeveral round, faint, or yellowiſh-green, leaves, greyiſh underneath, lying above the ground unevenly dented about the edges, and ſomewhat hairy, green, ſtalks, two or three feet high, with a few ſuch round leaves as grow below, but ſmaller, and ſomewhat branched at the top, whereon ſtand pretty large white flowers of five leaves each, with ſome yellow threads in the middle, ſtanding in a long-creſted browniſh-green huſk. After the flowers are paſt, there ariſeth ſometimes a round hard head, forked at the top, wherein is contained ſmall blackiſh ſeed; but uſually they fall away without any ſeed; and it is the kernels or grains of the root which are uſually called the white ſaxifrage ſeed, and ſo uſed.

Place. It groweth in many parts of Great Britain; in meadows and graſſy ſandy places: it is uſed to grow near Lamb's Conduit, on the back-ſide of Gray's Inn.

Time. It flowereth in May, and is then gathered, as well for that which is called the ſeed as to diſtil; for it quickly periſheth down to the ground in hot weather.

Government and Virtues. It is very effectual to cleanſe the reins and bladder, and to diſſolve the ſtone ingendered in them, and to expel it and the gravel by urine; to provoke urine alſo, and to help the ſtranguary; for which purpoſes the decoction of the herbs or roots in white wine, or the powder of the ſmall kernelly root, which is called the ſeed, taken in white wine, or in the ſame decoction made with white wine, is moſt uſual. The diſtilled water of the whole herb, roots, and flowers, is moſt commonly taken. It freeth and cleanſeth the ſtomach and lungs from thick and tough phlegm. There are not many better medicines to break the ſtone than this, or to cleanſe the urinary paſſage, and cure the gravel.

## BURNET-SAXIFRAGE.

Description. THE greater ſort of our Engliſh burnet-ſaxifrage groweth up with divers long ſtalks of winged leaves, ſet directly oppoſite one to another on both ſides, each being ſomewhat broad, and a little pointed and dented about the edges, of a ſad green colour. At the tops of the ſtalks ſtand umbels of white flowers, after which comes ſmall and blackiſh ſeed: the root is long and whitiſh, abiding long. Our leſſer burnet-ſaxifrage hath much finer leaves than the former, and very ſmall, and ſet one againſt another, deeply jagged about the edges, and of the ſame colour as the former. The umbels of the flowers are white, and the ſeed very ſmall; and ſo is the root, being alſo ſomewhat hot to the taſte.

Place. Theſe grow in moſt meadows in England, and are to be found concealed in the graſs ſcarcely to be diſcerned.

Time. They flower about July, and the ſeed is ripe in Auguſt.

Government and Virtues. Theſe herbs are both of the Moon. Theſe ſaxifrages are as hot as pepper, and Tragus ſaith, by his experience, that they are more wholeſome. They have the ſame properties that the parſleys have; but, in provoking urine, and eaſing the wind and cholic, are much more effectual. The roots or ſeed, being uſed either in powder, or in decoction, or any other way, help to break and void the ſtone in the kidneys, to digeſt cold, viſcous, and tough, phlegm in the ſtomach, and are a moſt eſpecial remedy againſt all kind of venom. Caſtoreum, being boiled in the diſtilled water hereof, is good to be given to thoſe that are troubled with cramps and convulſions. Some make the ſeed into comfit, (as they do carraway ſeed,) which is effectual to all the purpoſes aforeſaid. The juice of the herb, dropped into the moſt grievous wounds of the head, drieth up their moiſture and healeth them quickly. Some women uſe the diſtilled water, to take away ſpots or freckles in the face or any parts of the body; and to drink the ſame, ſweetened with ſugar, for all the purpoſes aforeſaid.

## SCABIOUS.

Description. THE common field ſcabious groweth up with many hairy, ſoft, whitiſh-green, leaves, ſome whereof are but very little if at all jagged on the edges, others very much rent and torn on the ſides, and have threads in them, which, upon the breaking, may be plainly ſeen; from among which riſe up divers hairy green ſtalks three or four feet high, with ſuch like hairy green leaves on them, but more deeply and finely divided, branched forth a little. At the tops, which are naked and bare of leaves for a good ſpace, ſtand round heads of flowers, of a pale bluiſh colour, ſet together in a head, the outermoſt whereof are larger than the inward, with many threads alſo in the middle, ſomewhat flat at the top, as the head with ſeed is likewiſe. The root is great, white, and thick, growing down deep in the ground, and abideth many years.

There is another ſort of field ſcabious, different in nothing from the former, but only that it is ſmaller.

The corn ſcabious differeth little from the firſt, but that it is greater, and the flowers more declining to purple; and the root creepeth under the ſurface of the earth, and runneth not deep in the ground as the firſt doth.

Place. The firſt groweth moſt uſually in meadows, eſpecially about London every where. The ſecond in ſome of the dry fields near London, but not ſo plentiful as the former. The third in the ſtanding corn, or fallow fields, and the borders of ſuch-like fields.

Time. They flower in June and July, and ſome abide flowering until it be late in Auguſt, and the ſeed is ripe in the mean time.

There are many other ſorts of ſcabious, but thoſe here deſcribed are moſt familiar with us: the virtues both of theſe and the red being much alike, you will take them as followeth.

GOVERNMENT AND VIRTUES, Mercury own the plant. Scabious is very effectual for all ſorts of coughs, ſhortneſs of breath, and all other diſeaſes of the breaſt and lungs, ripening and digeſting cold phlegm and other tough humours, voiding them by coughing and ſpitting. It ripeneth alſo all ſorts of inward ulcers and impoſthumes, the pleuriſy alſo, if the decoction of the herb, dry, or green, be made in wine, and drunk for ſome time together. Four ounces of the clarified juice of ſcabious, taken in the morning faſting, with a drachm of Mithridate or Venice treacle, freeth the heart from any infection of peſtilence, if after the taking of it the party perſpire two hours in bed. The green herb, bruiſed, and applied to any carbuncle or ſore, is found, by certain experience, to diſſolve or break it in three hours ſpace. The ſame decoction alſo, drunk, helpeth pains and ſtitches in the ſides. The decoction of the roots, taken for forty days together, or a drachm of the powder of them taken at a time in whey, doth (as Mathiolus ſaith) wonderfully help thoſe that are troubled with running or ſpreading ſcabs, tetters, or ringworms, even though they proceed of the venereal diſeaſe. The juice, or decoction, drunk, helpeth alſo ſcabs and breakings-out of itch and the like. The juice, made up into an ointment, is effectual for the ſame purpoſe. The ſame alſo helpeth all inward wounds, by the drying, cleanſing, and healing, quality therein. A ſyrup made of the juice and ſugar is very effectual to all the purpoſes aforeſaid, and ſo is the diſtilled water of the herb and flowers made in due ſeaſon; eſpecially to be uſed when the green herb is not in force to be taken. The decoction of the herb and roots, outwardly applied, doth wonderfully help all ſorts of hard or cold ſwellings in any part of the body, and is as effectual for any ſhrunk ſinew or vein. The juice of ſcabious made up with the powder of borax and camphire, cleanſeth the ſkin of the face or other parts of the body, not only from freckles and pimples, but alſo from morphew and leproſy. The head being waſhed with the ſame decoction, it cleanſeth it from dandriff, ſcurf, ſores, itches, and the like, being uſed warm. Tents, dipped in the juice or water thereof, not only heal green wounds, but old ſores and ulcers alſo. The herb bruiſed, and applied, doth in ſhort time looſen and draw forth any ſplinter, broken bone, arrow-head, or other thing lying in the fleſh.

## SCURVY-GRASS.

DESCRIPTION. OUR ordinary Engliſh ſcurvy graſs hath many thick leaves, more long than broad, and ſometimes longer and narrower; ſometimes ſmooth on the edges, and ſometimes a little waved; ſometimes plain, ſmooth, and pointed, ſometimes a little hollow in the middle, and round-pointed, of a ſad-green, and ſometimes a bluiſh, colour, every one ſtanding by itſelf upon a long foot-ſtalk, which is browniſh or greeniſh alſo, from among which riſe ſmall ſlender ſtalks, bearing a few leaves thereon like the other, but longer and leſs for the moſt part; at the tops whereof grow many whitiſh flowers with yellow threads in the middle, ſtanding about a green head which becometh the ſeed-veſſel. The ſeed is reddiſh, taſting ſomewhat hot: the root is compoſed of many white ſtrings, which ſtick deeply in the mud, wherein it chiefly delighteth; yet it will grow in upland and dry grounds; and taſteth a little brackiſh, or ſalt, even there, but not ſo much as where it hath ſalt water to feed upon.

Place. It groweth all along the Thames ſide, on the Eſſex and Kentiſh ſhores, from Woolwich round about the ſea-coaſts to Dover, Portſmouth, and even to Briſtol, where it is in plenty; the other, with round leaves, groweth in the marſhes in Holland in Lincolnſhire, and other places of Lincolnſhire by the ſea-ſide.

2. Dutch ſcurvy-graſs is moſt known and frequent in gardens, and hath divers freſh, green, and almoſt round, leaves, riſing from the root not ſo thick as the former, yet in ſome rich ground very large, not dented about the edges, nor hollow in the middle, every one ſtanding on a long foot-ſtalk; from among theſe riſe up divers long ſlender weak ſtalks, higher than the former, and with more white flowers, which turn into ſmaller pods, and ſmaller browniſh ſeed, than the former: the root is white, ſmall, and thready: the taſte of this is not ſalt at all, but hot, aromatical, and ſpicy.

Time. It flowereth in April or May, and the ſeed is ripe ſoon after.

Government and Virtues. It is an herb of Jupiter. The Engliſh ſcurvy-graſs is more uſed for its ſalt taſte, which doth ſomewhat open and cleanſe; but the Dutch ſcurvy-graſs is of better effect, and chiefly uſed by thoſe that have the ſcurvy, eſpecially to purge and cleanſe the blood, the liver, and the ſpleen, for all which diſeaſes it is of ſingular good effect, by taking the juice in the ſpring every morning faſting in a cup of drink. The decoction is good for the ſame purpoſe, and the herb, tunned up in new drink, either by itſelf, or with other things, openeth obſtructions, evacuateth cold, clammy, and phlegmatic, humours both from the liver and ſpleen, waſting and conſuming both the ſwelling and hardneſs thereof, and thereby bringing to the body a more lively colour. The juice alſo helpeth all foul ulcers and ſores in the mouth, if it be often gargled therewith; and, uſed outwardly, it cleanſeth the ſkin from ſpots, marks, or ſcars.

## SELF-HEAL.

Names. It is called prunel, carpenters-herb, hook-heal, and ſickle-wort.

Description. The common ſelf-head is a ſmall, low, creeping, herb, having many ſmall roundiſh-pointed leaves, ſomewhat like the leaves of wild mints, of a dark-green colour, without any dents on the edges, from among which riſe divers ſmall leaves up to the tops, where ſtand browniſh ſpiked heads, of many ſmall browniſh leaves like ſcales and flowers ſet together, almoſt like the head of caſſidony, which flowers are gaping, and of a bluiſh purple, or more pale below, in ſome places ſweet, but not ſo in others. The root conſiſts of many ſtrings or fibres downward, and ſpreadeth ſtrings alſo, whereby it increaſeth. The ſmall ſtalks, with the leaves, creeping upon the ground, ſhoot forth fibres taking hold of the ground, whereby it is made a great tuft in a ſhort time.

Place. It is found in woods and fields every where in this kingdom.

Time. It flowereth in May, and ſometimes in April..

Government and Virtues. This is an herb of Venus. It is a ſpecial herb for inward and outward wounds: take it inwardly in ſyrups for inward wounds; outwardly, in unguents and plaiſters, for outward. As ſelf-heal is like bugle in form, ſo alſo in the qualities and virtues, ſerving for all the purpoſes whereto bugle is applied, with good ſucceſs, either inwardly or outwardly. If it be accompanied with bugle, ſanicle, and other the like wound-herbs, it will be the more effectual; and to waſh or inject into ulcers, in the parts outwardly, where there is cauſe to repreſs the heat and ſharpneſs of humours flowing to any ſore, ulcer, inflammation, ſwelling, or the like; or to ſtay the flux of blood in any wound or part, this is uſed with good ſucceſs; as alſo to cleanſe the foulneſs of ſores, and cauſe them more ſpeedily to be healed. It is a good remedy for green wounds, to cloſe the lips of them, and to keep the place from any further inconvenience. The juice thereof, uſed with oil of roſes, to anoint the temples and forehead, is very effectual to remove the head-ach; and the ſame, mixed with honey of roſes, cleanſeth and healeth all ulcers in the mouth and throat, from what cauſe ſoever.

## SERVICE-TREE.

IT is ſo well known in the places where it grows, that it needeth no deſcription.

Time. It flowereth before the end of May, and the fruit is ripe in October.

Government and Virtues. Services, when they are mellow, are fit to be taken to ſtay the fluxes, ſcowering, and caſtings, yet leſs than medlars; if they be dried before they be mellow, and kept all the year, they may be uſed in decoction for the ſaid purpoſe, either to drink, or to bathe the parts requiring it; and are profitably uſed in that manner to ſtay the bleeding of wounds. The ſervice-tree is under the dominion of Saturn, and of a cold nature.

## SHEPHERD's PURSE.

Names. IT is alſo called ſhepherd's ſcrip, ſhepherd's pouch, toy-wort, pick-purſe, and caſe-weed.

Description. The root is ſmall, white, and periſhes every year. The leaves are ſmall and long, of a pale green colour, and deeply cut on both ſides: amongſt which ſpringeth up a ſtalk, which is ſmall and round, containing ſmall leaves upon it even to the top. The flowers are white, and very ſmall; after which come the little caſes which hold the ſeed, which are flat, almoſt in the form of a heart.

Place. They are frequent in Great-Britain, commonly by the path-ſides.

Time. They flower all the ſummer long; nay, ſome of them are ſo fruitful, that they flower twice a-year.

Government and Virtues. It is under the dominion of Saturn, and of a cold, dry, and binding, nature. It ſtops all fluxes of blood, either cauſed by inward or outward wounds; as alſo fluxes of the belly, bloody flux, and ſpitting of blood; being bound to the wriſts and ſoles of the feet, it helps the yellow-jaundice. The herb being made into a poultice, helps inflammations and St. Anthony's fire; the juice, being dropped into the ears, helps pains and noiſes therein. A good ointment may be made of it for all wounds, eſpecially wounds in the head.

## SMALLAGE.

THIS is alſo very well known, and therefore I ſhall not trouble the reader with any deſcription thereof.

Place. It groweth naturally in wet and marſhy grounds; but, if it be ſown in gardens, it there proſpereth very well.

Time. It abideth green all the winter, and ſeedeth in Auguſt.

Government and Virtues. It is an herb of Mercury. Smallage is hotter, drier, and much more medicinable, than parſley, for it much more openeth obſtructions of the liver and ſpleen, rarefieth thick phlegm, and cleanſeth it and the blood withal. It provoketh urine, and is good againſt the yellow-jaundice. It is effectual againſt tertian and quartan agues, if the juice thereof be taken; but eſpecially made into a ſyrup. The juice alſo, put to honey of roſes and barley-water, is very good to gargle the mouth and throat of thoſe that have ſores and ulcers in them, and will quickly heal them: the ſame lotion alſo cleanſeth and healeth all other foul ulcers and cancers elſewhere. The ſeed is eſpecially uſed to break and expel wind, to kill worms, and to help a ſtinking breath. The root is effectual to all the purpoſes aforeſaid, and is held to be ſtronger in operation than the herb, but eſpecially to open obſtructions, and to rid away any ague, if the juice thereof or the decoction be taken in wine. All the purpoſes of this herb are likewiſe anſwered by the Solar Tincture, which imbibes its occult property.

## SOPE-WORT, OR BRUISE-WORT.

DESCRIPTION. THE root creepeth under ground far and near, with many joints therein, of a brown colour on the outſide, and yellowiſh within, ſhooting forth in divers places many weak round ſtalks, full of joints, ſet with two leaves a-piece at every one of them on the contrary ſide, which are ribbed ſomewhat like that of plantane, and faſhioned like the common field white campion leaves, ſeldom having any branches from the ſides of the ſtalks, but ſet with divers flowers at the top ſtanding in long huſks like the wild campions, made of five leaves each, round at the ends, and a little dented in the middle, of a pale roſe colour, almoſt white, ſometimes deeper, and ſometimes paler, of a reaſonable good ſcent.

PLACE. It groweth wild in low and wet grounds in many parts of England, by the brooks and ſides of running waters.

TIME. It flowereth uſually in July, and ſo continueth all Auguſt and part of September.

GOVERNMENT AND VIRTUES. Venus owns it. The country people in many places do uſe to bruiſe the leaves of ſope-wort, and lay it to their fingers, hands, or legs, when they are cut, to heal them. Some ſay it is diuretic, and expels gravel and ſtone in the kidneys, and is alſo good to void hydropical waters, thereby to cure the dropſy, tympany, or an impoveriſhed ſtate of the blood.

## SORREL.

OUR ordinary ſorrel, which groweth in gardens, and alſo wild in the fields, is ſo well known, that it needeth no deſcription.

GOVERNMENT AND VIRTUES. It is under the dominion of Venus. Sorrel is prevalent in all hot diſeaſes, to cool any inflammation and heat of blood in agues peſtilential or choleric, or other ſickneſs and fainting, ariſing from heat, and to refreſh the overſpent ſpirits with the violence of furious or fiery fits of agues, to quench thirſt, and procure an appetite in fainting or decayed ſtomachs; for it reſiſteth the putrefaction of the blood, killeth worms, and is a cordial to the heart, for which the ſeed is more effectual, being more drying and binding, and thereby ſtayeth the hot humours in the bloody flux, or flux of the ſtomach. The roots alſo, in a decoction, or in powder, are effectual for all the ſaid purpoſes. Both roots and ſeed, as well as the herb, are held powerful to reſiſt the poiſon of the ſcorpion. The decoction of the roots is taken to help the jaundice, and to expel the gravel and ſtone. The decoction of the flowers made with wine, and drunk, helpeth the black jaundice, as alſo the inward ulcers of the body or bowels. A ſyrup made with the juice of ſorrel and fumitory is a ſovereign help to kill thoſe ſharp humours that cauſe the itch. The juice thereof with a little vinegar may be uſed outwardly for the ſame cauſe, and is alſo profitable for tetters, ringworms, &c. It helpeth alſo to diſcuſs the kernels in the throat; and the juice, gargled in the mouth, helpeth the ſores therein. The leaves wrapped up in a colewort leaf, and roaſted under the embers, and applied to a hard impoſthume, botch, bile, or plague-ſore, both ripen and break it. The diſtilled water of the herb is of much good uſe for all the purpoſes aforeſaid; and the leaves eaten in a ſallad are excellent for the blood.

## WOOD-SORREL.

Description. THIS groweth low upon the ground, having a number of leaves coming from the root, made of three leaves like trefoil, but broad at the ends, and cut in the middle, of a faint yellowiſh green colour, every one ſtanding on a long footſtalk, which at their firſt coming up are cloſe folded together to the ſtalk; but, opening afterwards, are of a fine ſour reliſh, and yield a juice which will turn red when it is clarified, and maketh a moſt dainty clear ſyrup. Among theſe leaves riſeth up divers ſlender weak footſtalks, with every one of them a flower at the top, conſiſting of five ſmall pointed leaves, ſtar-faſhion, of a white colour in moſt places, and in ſome daſhed over with a ſmall ſhow of a bluiſh on the back ſide only. After the flowers are paſt, follow ſmall round heads, with ſmall yellowiſh ſeed in them. The roots are nothing but ſmall ſtrings faſtened to the end of a ſmall long piece, all of them being of a yellowiſh colour.

Place. It groweth in many parts of England, in woods and other places not too much open to the ſun.

Time. It flowereth in April and May.

Government and Virtues. Venus owns it. Wood-ſorrel ſerveth to all the purpoſes that the other ſorrels do, and is more effectual in hindering the putrefaction of blood, and ulcers in the mouth and body, and in cooling and tempering heats and inflammations, to quench thirſt, to ſtrengthen a weak ſtomach, to procure an appetite, to ſtay vomiting, and is very excellent in any contagious ſickneſs, or peſtilential fever. The ſyrup made of the juice is effectual in all the caſes aforeſaid, and ſo is the diſtilled water of the herb. Spunges or linen cloths wet in the juice, and applied outwardly to any hot ſwellings or inflammations, do much cool and help them. The ſame juice taken, and gargled in the mouth, for ſome time, and frequently repeated, doth wonderfully help a ſtinking canker or ulcer therein. It is of ſingular ſervice for wounds in any part of the body, to ſtay the bleeding, and to cleanſe and heal the wounds; and helpeth to ſtay any hot defluxions into the throat or lungs, and cleanſeth the viſcera.

## SOW-THISTLES.

SOW-THISTLES grow in every part of this kingdom, and are ſo well known, that they need no deſcription.

Place. They grow in gardens and manured grounds, and ſometimes by old walls, the path-ſides of fields and highways.

Government and Virtues. This and the former are under the influence of Venus. Sow-thiſtles are cooling, and ſomewhat binding, and are very fit to cool an hot ſtomach, and to eaſe the gnawing pains thereof. The herb, boiled in wine, is very helpful to ſtay the diſſolution of the ſtomach; and the milk that is taken from the ſtalks when they are broken, given in drink, is beneficial to thoſe that are ſhort winded. Pliny ſaith, that it cauſed the gravel and ſtone to be voided by urine, and that the eating thereof helpeth a ſtinking breath. The ſaid juice, taken in warm drink, helpeth the ſtranguary. The decoction of the leaves and ſtalks cauſeth abundance of milk in nurſes, and their children to be well coloured, and is good for thoſe whoſe milk doth curdle in their breaſts. The juice boiled or thoroughly heated with a little oil of bitter almonds in the peel of a pomegranate, and dropped into the ears, is a ſure remedy for deafneſs, ſingings, and all other diſeaſes, in them. The herb bruiſed, or the juice, is profitably applied to all hot inflammations in the eyes, or whereſoever elſe, and for wheals, bliſters, or other the like eruptions, or heat, in the ſkin; alſo for the heat and itching of the hemorrhoids, and the heat and ſharpneſs of humours in the ſecret parts of man or woman. The diſtilled water of the herb is not only effectual for all the diſeaſes aforeſaid, to be taken inwardly with a little ſugar, (which medicine the daintieſt ſtomach will not refuſe,) but outwardly, by applying cloths or ſponges wetted therein. It is good for women to waſh their faces therewith, to clear the ſkin, and to give a luſtre thereto. The virtue of this plant lies in its milky juice, which is of great value in difficulty of hearing. This often ariſes from obſtructing wax, often from inflammation, and ſometimes from both theſe cauſes conjoined.

## SOUTHERNWOOD.

SOUTHERNWOOD is ſo well known to be an ordinary inhabitant in almoſt all gardens, that it needeth no deſcription.

Time. It flowereth for the moſt part in July and Auguſt.

Government and Virtues. It is a Mercurial plant, worthy of more eſteem than it hath. Dioſcorides ſaith, that the ſeed bruiſed, heated in warm water, and drunk, helpeth thoſe that are troubled with the cramps, or convulſions of the ſinews, the ſciatica, or difficulty in making water. The ſame taken in wine is an antidote or counter-poiſon, and driveth away ſerpents and other venomous creatures; as alſo the ſmell of the herb, being burnt, doth the ſame. The oil thereof, anointed on the back-bone before the fits of agues come, preventeth them; it taketh away inflammations in the eyes, if it be put with ſome part of a roaſted quince, and boiled with a few crumbs of bread and applied. Boiled with barley-meal, it taketh away pimples, puſhes, or wheals, that riſe in the face or other part of the body. The ſeed as well as the dried herb is often given to kill worms in children. The herb bruiſed helpeth to draw forth ſplinters and thorns out of the fleſh. The aſhes thereof dry up and heal old ulcers that are without inflammation, although by the ſharpneſs thereof it makes them ſmart. The aſhes, mingled with old ſallad oil, help thoſe that have their hair fallen, and are bald, cauſing the hair to grow again either on the head or beard. Durantes ſaith, that the oil made of ſouthernwood, and put among the ointments that are uſed againſt the French diſeaſe, is very effectual, and likewiſe killeth lice in the head. The diſtilled water of the herb is ſaid to help them much that are troubled with the ſtone, as alſo for the diſeaſes of the ſpleen and mother. The Germans commend it for a ſingular wound-herb, and therefore call it ſtab-wort. It is held by all writers, ancient and modern, to be more offenſive to the ſtomach than wormwood, which has thrown it into diſrepute.

## SPIGNEL.

Description. THE roots of common ſpignel do ſpread much and deep in the ground, many ſtrings or branches growing from one head, which is hairy at the top, of a blackiſh brown colour on the outſide, and white within, of a pleaſant ſmell and aromatic taſte, whence riſe ſundry long ſtalks of fine cut leaves like hairs, ſmaller than dill, ſet thick on both ſides of the ſtalk, and of a good ſcent. Among theſe leaves riſe up round ſtiff ſtalks, with a few joints and leaves, and at the tops an umbel of fine pure white flowers, at the edges whereof ſometimes will be ſeen a ſhow of reddiſh blue colour, eſpecially before they be full blown, and are ſucceeded by ſmall ſomewhat-round ſeed, bigger than the ordinary fennel, and of a browner colour, divided into two parts, and creſted on the back, as moſt of the umbelliferous ſeeds are.

Place. It groweth wild in Lancaſhire, Yorkſhire, and other northern counties; and is alſo planted in gardens.

Government and Virtues. It is an herb of Venus. Galen ſaith, the roots of ſpignel are available to provoke urine; but, if too much thereof be taken, it cauſeth head-ach. The roots boiled in wine or water, and drunk, help the ſtranguary and ſtoppings of the urine, the wind, ſwellings, and pains, in the ſtomach, and all joint-achs. If the powder of the roots be mixed with honey, and the ſame taken as a licking medicine, it breaketh tough phlegm, and drieth up the rheum that falleth on the lungs. The roots are accounted very effectual againſt the ſtinging or biting of any venomous creature, and is one of the ingredients in mithridate and other antidotes for the ſame.

## SPLEEN-WORT, OR CETRACH.

Description. THE ſmooth ſpleen-wort, from a black, thready, and buſhy, root, ſendeth forth many long ſingle leaves, cut in on both ſides into round dents, almoſt to the middle, which is not ſo hard as that of pollipody, each diviſion being not always ſet oppoſite unto the other, but between each, ſmooth, and of a light green on the upper-ſide, and a dark yellowiſh roughneſs on the back, folding or rolling itſelf inward at the firſt ſpringing up.

Place. It groweth as well upon ſtone-walls as moiſt and ſhadowy places about Briſtol and the other the weſt parts plentifully; as alſo on Framingham-caſtle, on Beckonsfield church in Berkſhire, at Stroud in Kent, and elſewhere, and abideth green all the winter.

Government and Virtues. Saturn owns it. It is generally uſed againſt infirmities of the ſpleen: it helpeth the ſtranguary, and waſteth the ſtone in the bladder, and is good againſt the yellow-jaundice and the hiccough; but the uſe of it in women hindereth conception. Mathiolus ſaith, that, if a drachm of the duſt, that is on the back-ſide of the leaves, be mixed with half a drachm of amber in powder, and taken with the juice of purſlane or plantane, it will help the running of the reins: and that the herb or root, being boiled and taken, helpeth all melancholic diſeaſes, and thoſe eſpecially that ariſe from the French diſeaſes. Camerarius ſaith, that the diſtilled water thereof, being drunk, is very effectual againſt the ſtone; and that the lye, made of the aſhes thereof, being drunk for ſome time together, helpeth ſplenetic perſons; it is uſed in outward remedies for the ſame purpoſe.

## STAR-THISTLE.

Description. THE common ſtar-thiſtle hath divers long and narrow leaves lying next the ground, cut or torn on the edges, ſomewhat deeply, into many almoſt even parts, ſoft or a little woolly all over the green, among which riſe up divers weak ſtalks parted into many branches, all lying or leaning down to the ground, ſo that it ſeemeth a pretty buſh, ſet with many divided leaves up to the tops, where ſeverally ſtand long and ſmall whitiſh-green heads, ſet with ſharp and long white pricks, (no part of the plant being elſe prickly,) which are ſomewhat yellowiſh: out of the middle whereof riſeth the flower compoſed of many ſmall reddiſh-purple threads; and in the heads, after the flowers are paſt, come ſmall whitiſh round ſeed, lying in down as the others do. The root is ſmall, long, and woody, periſhing every year, and riſing again of its own ſowing.

Place. It groweth wild in the fields about London in many places.

Time. It flowereth early, and ſeedeth in July, and ſometimes in Auguſt.

Government and Virtues. This, like almoſt all thiſtles, is under Mars. The ſeed of this ſtar-thiſtle made into powder, and drunk in wine, provoketh urine, and helpeth to break the ſtone, and expel it. The root in powder given in wine, is good againſt the plague, or peſtilence; and, drunk in the morning faſting for ſome time together, is very profitable for a fiſtula in any part of the body. Baptiſta Sardus doth much commend the diſtilled water, to help the French diſeaſe, to open obſtructions of the liver, and cleanſe the blood from corrupted humours: and it is profitably given againſt quotidian or tertian agues.

## STRAWBERRIES.

THESE are ſo well known through this land, that they need no deſcription.

Time. They flower in May ordinarily, and the fruit is ripe ſhortly after.

Government and Virtues. Venus owns the herb. Strawberries, when they are green, are cold and dry; but, when they are ripe, they are cold and moiſt. The berries are excellent good to cool the liver, the blood, and the ſpleen, or a hot choleric ſtomach; to refreſh and comfort the fainting ſpirits, and to quench thirſt. They are good alſo for other inflammations, yet it is not amiſs to refrain from them in a fever, leſt by their putrifying in the ſtomach they increaſe the fits. The leaves and roots boiled in wine or water, and drunk, do likewiſe cool the liver and blood, and aſſuage all inflammations in the reins and bladder, provoke urine, and allay the heat and ſharpneſs thereof; the ſame alſo, being drunk, ſtay the bloody-flux, and help the ſwellings of the ſpleen. The water of the berries, carefully diſtilled, is a ſovereign remedy and cordial in the pacification of the heart; and is good for the yellow-jaundice. The juice dropped into foul ulcers, or the decoction of the herb and root, doth wonderfully cleanſe and help to cure them. Lotions and gargles for ſore mouths, or ulcers therein, or elſewhere, are made with the leaves and roots, which are alſo good to faſten looſe teeth, and to heal ſpungy foul gums. It helpeth alſo to ſtay catarrhs or defluxions of rheum into the mouth, throat, teeth, or eyes. The juice, or water, is good for hot and red inflamed eyes: it is alſo of excellent property for all puſhes, wheals, and other breakings forth of hot and ſharp humours, in the face and hands, or other parts of the body, to bathe them therewith; and to take away any redneſs in the face, or ſpots or other deformities in the ſkin, and to make it clear and ſmooth. Some uſe this medicine: Take ſo many ſtrawberries as you ſhall think fitting, and put them into a diſtillatory, or body of glaſs, fit for them; which, being well cloſed, ſet in a bed of horſe-dung for twelve or fourteen days, and afterwards diſtil it carefully, and keep it for your uſe. It is an excellent water for hot inflamed eyes, and to take away any film or ſkin that beginneth to grow over them, and for ſuch other defects in them as may be helped by any outward medicine.

## SUCCORY.

Description. The garden-ſuccory hath longer and narower leaves than endive, and more cut in and torn at the edges, and the root abideth many years; it beareth alſo many blue flowers like endive, and the ſeed is hardly diſtinguiſhable from the ſeed of the ſmooth or ordinary endive.

Government and Virtues. It is an herb of Jupiter. Garden-ſuccory, as it is more dry and leſs cold than endive, ſo it openeth more. A handful of the leaves or roots boiled in wine or water, and a draught thereof drunk faſting, driveth forth choleric and phlegmatic humours; openeth obſtructions of the liver, gall, and ſpleen; helpeth the yellow-jaundice, the heat of the reins, and of the urine; the dropſy alſo, and thoſe that have an evil diſpoſition in their bodies by reaſon of long ſick-

neſs,

neſs, evil diet, &c. which the Greeks call *cachexia.* A decoction thereof made with wine, and drunk, is very effectual againſt long lingering agues; and a drachm of the ſeed in powder drunk in wine before the fit of an ague helpeth to drive it away. The diſtilled water of the herb and flowers (if you can take them in time) is good for hot ſtomachs, and in agues, either peſtilential or of long continuance; for ſwoonings, and the paſſions of the hear; for the heat and head-ach in children, and for the diſorders of the blood and liver. The ſaid water, or the juice, or the bruiſed leaves, applied outwardly, allayeth ſwellings, inflammations, St. Anthony's fire, puſhes, wheals, and pimples, eſpecially uſed with a little vinegar, as alſo to waſh peſtiferous ſores. The ſaid water is very effectual for ſore eyes that are inflamed with redneſs, and for nurſes breaſts that are pained by abundance of milk.

## STONE-CROP, OR SMALL HOUSE-LEEK.

Description. IT groweth with divers trailing branches upon the ground, ſet with many thick, fat, roundiſh, whitiſh, leaves, pointed at the ends; the flowers ſtand many of them together, ſomewhat looſely; the roots are ſmall, and run creeping under the ground.

Place. It groweth upon the ſtone walls and mud walls, upon the tiles of houſes and penthouſes, and amongſt rubbiſh, and in moſt gravelly places.

Time. It flowereth in June and July, and the leaves are green all the winter.

Government and Virtues. It is under the dominion of the moon, cold in quality, and ſomething binding, and therefore very good to ſtay defluxions, eſpecially ſuch as fall upon the eyes: it ſtops bleeding both inward and outward, helps cankers and all fretting ſores and ulcers; it abates the heat of choler, thereby preventing diſeaſes thence ariſing from choleric humours. It expels poiſon, reſiſteth peſtilential fevers, and is exceeding good alſo for tertian agues. It is ſo harmleſs an herb, you can ſcarce uſe it amiſs. Being bruiſed and applied to the place, it helps the king's-evil, and any other knots, or kernels, in the fleſh: as alſo the piles.

## SARSAPARILLA.

THIS is reckoned amongſt the ſorts of prickly bindweeds, of which there are two ſorts, and this ſarſaparilla brought from the Weſt-Indies makes the third kind. Their names with their deſcriptions ſeverally follow.

Description. 1. Prickly bindweed with red berries, called in Latin *ſmilax aſpera fructu rubro.* This groweth up with many branches, wherewith it windeth about trees and other things, ſet with many crooked pricks or thorns like a bramble, all the whole length, binding this way and that in a ſeemly proportion ; at every joint it boweth or bendeth itſelf, having a ſomewhat broad and long leaf thereat, ſtanding upon a long foot-ſtalk, and is broad at the bottom, with two forked round ends, and then groweth narrower unto the point ; the middle-rib on the backſide of moſt of them having many ſmall thorns or pricks, and alſo about the edges ; the loweſt being the largeſt, and growing ſmaller up to the top, ſmooth and of a fair green colour, and ſometimes ſpotted with white ſpots. At the joints with the leaves alſo come forth tendrils, like a vine, whereby it winds itſelf; the flowers ſtand at the tops of the branches at three or four joints, many breaking forth into a cluſter, which are white, compoſed of ſix leaves each, ſtar-faſhion, and ſweet in ſcent, after which come the fruit, which are red berries when they are ripe, of the bigneſs of aſparagus-berries or ſmall grapes; and in ſome leſs, wherein are contained ſometimes two or three hard black ſtones, like thoſe of aſparagus. The root is ſlender, white, and long, in hard dry grounds not ſpreading far, but in the looſer and moiſter places running down into the ground a pretty way, with divers knots and joints.

2. Prickly bindweed with black-berries, *ſmilax aſpera fructu nigro.* This other prickly bindweed groweth like the former, the branches being joined in like manner with thorns on them, but not climbing like the former ; the leaves are ſomewhat like it, not having thoſe forked ends at the bottom of every leaf, but almoſt wholly round, and broad at the bottom, of a darker-green colour alſo, ſeldom having any thorns or pricks, either on the back or edges of the leaves, with tendrils like a vine alſo : the flowers come forth in the ſame manner, and are ſtar-faſhion, conſiſting of ſix leaves like the other, of an incarnate or bluſh colour, with a round red umbone in the middle of every one, which is the beginning of the berry, which when it is ripe will be black, being more ſappy or fleſhy than the other, with ſtones or kernels within them like unto it : the roots hereof are bigger and fuller than the former for the moſt part, and ſpread further under the ground.

3. Sarſaparilla of America, *ſmilax aſpera Peruviana.* The ſarſaparilla that cometh from America into Spain hath been ſeen freſh, even the whole plant, and hath been verified in all things to reſemble the prickly bindweed, and in nothing different from it. But certainly the plant of ſarſaparilla that groweth in Peru and the Weſt-Indies is a peculiar kind of itſelf, differing from the *ſmilax aſpera* as mechoacan doth from our briony : this doth wind itſelf about poles or any thing elſe it can lay hold on to climb on ; the branches have crooked prickles growing on them as the *ſmilax aſpera* hath, but fewer and not ſo ſharp ; it hath very green leaves like thoſe of bindweed, but longer, and cornered like ivy-leaves, ending in a long point : the flowers are ſaid to be very great and white, every one as big as a middle-ſized diſh, which,

opening in the morning, fadeth at night; which occaſioned the Spaniards to call the whole plant *buenos noches*, that is, good night. Gerrard deſcrbes the ſarſaparilla to be the roots of a ſhrub, having leaves like ivy; but ſaith nothing of the flowers or fruit, which it may be believed were not then diſcovered.

PLACE AND TIME. The two firſt grow in Italy, Spain, and other warm countries, whether continent or iſles, throughout Europe and Aſia. The third is found only in the Weſt-Indies; the beſt is ſaid to come from the Honduras, others not ſo good from other places, as the fertility or barrenneſs of the ground, and the temperature of the climate, afford it; and it hath ripe berries early in hot countries.

GOVERNMENT AND VIRTUES. Theſe are all plants of Mars, of an healing quality, howſoever uſed; Dioſcorides ſaith, that both leaves and berries, being drunk before or after any deadly poiſon is taken, are a remedy there-againſt, ſerving to expel it. It is ſaid alſo, that, if to a new-born child ſome of the juice of the berries hereof be given, it ſhall not be hurt by poiſon ever after; it is given as an antidote againſt all ſorts of poiſon and venomous things: if twelve or ſixteen of the berries, being beaten to powder, be given in wine, it procureth urine, when it is ſtopped; the diſtilled water of the flowers, being drunk, worketh the ſame effect, and cleanſeth the reins, and aſſuageth inward inflammations. If the eyes be waſhed therewith, it taketh away all heat and redneſs in them; and, if the ſores of the legs be waſhed therewith, it healeth them thoroughly. The true ſarſaparilla is held generally not to heat, but rather to dry, the humours; yet it is eaſily perceived, that it doth not only dry the humours, but waſteth them away, by a ſecret and hidden property therein; much whereof is performed by ſweating, which it promoteth very effectually. It is much uſed in many kinds of diſeaſes; as in all cold fluxes from the head and brain, rheums, and catarrhs, as alſo in all cold griefs of the ſtomach, and expelleth wind very powerfully. It helpeth not only the French diſeaſe, but all manner of achs in the ſinews or joints; all running ſores in the legs, all phlegmatic ſwellings, tetters, or ringworms, and all manner of ſpots, and foulneſs of the ſkin; it is not proper to be given to thoſe whoſe livers are over hot, or to ſuch as have agues. In former times it was uſed beaten to powder and ſo drunk; others uſed to boil it until it became tender, which, being beaten or broken, was afterwards ſtrained into the decoction, making a kind of thick drink like cream. Some others, and that moſt uſually, boiled it in water, to the half, or the conſumption of the third part, as they would have it ſtronger or weaker, and that either by itſelf or with other things proper for the diſeaſe it was intended for; and others alſo put it amongſt other things for drink.

An excellent diet-drink may be made as follows: Take lignum vitæ, which is guaiacum, nine ounces; bark of the ſame two ounces, ſaſſafras one ounce, ſarſaparilla four ounces, juniper-berries one ounce; boil them in two ounces of fountain-water to the conſumption of half, add to the ſtrained liquor coriander-ſeeds four drachms, cinnamon, liquorice, each two drachms. This may be taken as an ordinary drink for all the diſeaſes before-mentioned.

## SAUNDERS.

Kinds and Description. In our ſhops, for phyſical uſe we have three ſorts of ſaunders, whereof the white and yellow are ſweet woods, but the yellow is the ſweeteſt; the red hath no ſcent. The ſaunders-tree groweth to be as big as a walnut-tree, having freſh green leaves like the maſtic-tree, and darkiſh blue flowers, the fruit being like cherries for the ſize, but without any taſte; black when they are ripe, and quickly falling away. The wood itſelf is without ſcent, as it is ſaid, while it is living and freſh, and ſmelleth ſweet only when it is dry. The white and the yellow woods are ſo hard to be diſtinguiſhed before that time, that none but thoſe Indians that uſually fell thoſe trees do know their difference before-hand; and can tell which will prove better than others: the chiefeſt part, and ſmelling ſweeteſt, is the heart of the wood. They are diſtinguiſhed by theſe names, *ſantalum album citrinum, et rubrum.*

Government and Virtues. All the ſaunders are under the ſolar regimen, they are cooling and cordial, and uſed together in ſundry cordial medicines; but the white and the yellow are the more cordial and comfortable, by reaſon of their ſweetneſs; and the red more cooling and binding; which quality neither of the other are without, though in a leſs proportion. The red is often uſed to ſtay thin rheum falling from the head, and to cool hot inflammations, hot gouts, and in hot agues to cool and temper the heat; but the white and yellow are both cordial and cephalic, applied with roſe-water to the temples, procuring eaſe in the head-ach, and are ſingular good for weak and fainting ſtomachs through heat, and in the hot fits of agues. They are very profitably applied in fomentations for the ſtomach, ſpirits, and palpitations of the heart, which alſo do comfort and ſtrengthen them, and temperate the melancholy humour, and procure alacrity and mirth, which quality is attributed to the yellow more than the white.

## SCAMMONY.

Description. THE true ſcammony hath a long root of a dark aſh-colour on the outſide, and white within, and of the bigneſs of an arm, with a pith in the middle thereof, and many fibres thereat, from whence ariſe many long, round, green, branches, winding themſelves like a bindweed about ſtakes and trees, or any other thing that ſtands next it, unto a good height, without any claſping tendrils, like the true or wild vine: from the joints of the branches come forth the leaves, every one by itſelf upon ſhort foot ſtalks, ſomewhat broad at the bottom, with two corners next thereto, and ſome alſo round; and then growing long and narrow to the end, being of a fair-green colour, and ſmooth, ſomewhat ſhining. Towards the tops of the branches, at the joints with the leaves, come forth large whitiſh bell-flowers, with wide-open brims and narrow bottoms, after which come round heads, wherein is contained three or four black ſeeds; if any part of this plant be broken, it yieldeth forth a milk, not hot, nor burning, nor bitter, yet ſomewhat unpleaſant, provoking loathing, and almoſt caſting.

NAMES. It is called *ſcammonia* both in Greek and Latin. The dried juice, which is moſt in uſe, is called alſo *ſcammoniacum* in the druggiſts, and apothecaries ſhops, as alſo with moſt writers, and ſome call the plant ſo too. When it is prepared, that is, baked in a quince under the embers, or in an oven, or any other way, it is called *diagridium*.

PLACE AND TIME. Scammony groweth in Syria, and the farther eaſtern parts, where no froſts come in the winter; for where any froſt comes it quickly periſheth, conſequently it flouriſhes in hot climates only.

GOVERNMENT AND VIRTUES. This is a martial plant, and of a churliſh nature, ſo that there had need be great care taken in the choice thereof, that only that be uſed in phyſic which is pure and without adulteration; which may be known if it be not heavy, or cloſe compact together, but that it be moderately light, with ſome ſmall holes, or hollowneſs, here and there, therein; and that it be ſmooth and plain in the breaking, and not in grains or knots, or having ſmall ſticks or ſtones in it; ſomewhat clear and blackiſh, but not of a deadiſh, dark, or ill-favoured, colour; and that it may be made quickly into a very fine and white powder. It purgeth both phlegm, yellow choler, and watery humours, very ſtrongly; but, if it be indiſcreetly given, it will not only trouble the ſtomach more than any other medicine, but will alſo ſcour the guts, in working too powerfully, oftentimes unto blood, and oftentimes unto faintings and ſwoonings, and therefore is not fit to be given to any gentle or tender body. Meſue declareth three ſeveral hurts or dangers that come to the body thereby, and the remedies of them: The firſt is, ſaith he, that it ingendereth certain gnawing winds in the ſtomach, ſo much offending it, that it provoketh to vomit. To be baked therefore in a quince, and ſome parſley, fennel, or wild carrot ſeed, or galanga, mixed with it, is the remedy hereof. The next is, that it inflameth the ſpirits, by the overmuch ſharpneſs or fierceneſs therein; whereby it readily induceth fevers, eſpecially in thoſe that are ſubject to obſtructions, and replete with putrid humours; which inconveniences are taken away by putting thoſe things into your decoctions that do cool and quench the heat thereof; and ſuch are, the mucilage of the ſeeds of pſyllum, or fleawort; prunes boiled, or rather the pulp of them, the juice, or the julep, or the water, of roſes or violets, or if before the boiling thereof (that is the ſcammony) you ſteep it in the oil of roſes, or violets, or in the juice of a quince, and mingle it with a little ſhumac or ſpodium. A third is, that, having a ſtrong opening and drawing faculty, it cauſeth immoderate fluxes of the belly, by opening the mouth of the veins more than is fit: this harm is alſo taken away by mixing aſtringent and reſtraining things with it, ſuch as maſtic, and eſpecially yellow, myrobolans, and quinces, or the juice of them. Again, it raiſeth the entrails and guts, by reaſon of the ſharp juice wherewith it abounds, and by which it procureth pains therein; this danger is remedied if moiſt, fat, and ſlippery, things be uſed with it, as *gum-tragacanth bdellium*, and oil of almonds and roſes, as alſo the pulp of prunes made up with ſugar, the mucilage of fleawort-ſeeds, maſtic, and quinces, taken afterwards, and warm water laſt of all; all which cauſe it to paſs the quicker from the ſtomach and bowels, and thereby prevents its doing harm. This fault is alſo helped if cold medicines as well as hot be mixed together to be given, thereby to yield help to the heart, liver, and ſtomach. Dioſcorides ſaith, if the juice be applied to the womb, it deſtroyeth the birth, being mixed with honey and ox-gall; and rubbed on wheals, pimples, and puſhes, takes them all away: and, bolied in vinegar, and anointed, takes away the leproſy, and outward marks in the ſkin, being diſſolved in roſe-water and vinegar, and the head moiſtened therewith, eaſeth the continual pains thereof. A drachm or two of the roots of ſcammony purge in the ſame manner as the juice doth, if ſome of the things that are appointed therewith be given in it. The roots boiled in water, and made into a poultice, with barley-meal, eaſeth the ſciatica, being laid thereon; it taketh away ſcurfs and ſcabs if they be waſhed with the vinegar wherein the roots have been boiled, and alſo healeth impoſthumes.

## SEBESTEN, OR ASSYRIAN PLUMB.

Description and Names. THE ſebeſten-tree groweth not ſo high as the plumb-tree. It is covered with a whitiſh bark; the branches are green, whereon grow rounder, thicker, and harder, leaves. The bloſſoms are white, and conſiſt of five leaves each, growing together on a long ſtalk, which afterwards turn into ſmall berries, rather than plumbs, of blackiſh-green colour when they are ripe, every one ſtanding in a little cup, of a ſweet taſte, and glutiuous or clammy ſubſtance, and a very thick ſkin; within which lieth a three-ſquare hard ſtone, with a thick ſhell and a ſmall kernel; theſe are gathered and laid in the ſun, whereby they grow wrinkled: and ſo they are kept and brought to us in boxes.

## WILD SEBESTEN.

THE wild ſebeſten is in all things like the other, but that it groweth lower, much like unto a hedge-buſh, and with ſmaller and thinner leaves. The flowers and fruit are like, but leſs.

In ſhops they have only the name of ſebeſten, but in Latin the tree is called *myxos*, *myxa*, and *mixaria*.

Place and Time. The firſt groweth in Syria, and is but planted in Egypt, whence they were brought into Italy in Pliny's time, and grafted on the ſervice-tree, and do now grow in many places in their orchards. It is ſo tender that it will not endure the cold with us. The wild kind, as Alpinus ſaith, is natural in Egypt: they flower in May, and the fruit is ripe in September.

Government and Virtues. This is a plant of Venus: the Arabians and Greeks hold that they open the body as much, or rather more, by reaſon of the mucilage in them, than the damaſk prunes: more however while they are green, and leſs when they are dry; yet the decoction of them, or the infuſion of them in broth, although dried and taken whole, worketh effectually; which Fuſchius denieth, and affirmeth that they are rather binding. The ſerve to cool any intemperate heat of the ſtomach or liver, and therefore are good in hot agues, and to purge choler, whereof the come. Mathiolus ſaith, that ten drachms, or twelve at the moſt, of the pulp of ſebeſtens taken from the ſkins and ſtones, work to as good purpoſe as the pulp of *caſſia fiſtula*. They are very effectual alſo to lenify the hoarſeneſs and roughneſs of the throat; they help the cough and wheaſing of the lungs, and diſtillations upon them, by lenifying of the paſſages, and cauſing much phlegm to be voided. They alſo give eaſe to ſuch as are troubled with pains in their ſides, and thoſe that are troubled with heat in their urine, and ſharpneſs thereof proceeding from choler or ſalt phlegm; they alſo drive forth the long worms of the belly. There is a kind of birdlime made of theſe fruits by boiling them a little in water to take away the ſkins and ſtones, and afterwards boiling them more to a conſiſtence; the which (as ſaith Mathiolus) was uſed at Venice to catch birds; but Alpinus ſaith they uſe it in Egypt as a plaſter to diſſolve hard tumours or ſwellings.

## SENA.

Description. THE true ſena is ſaid to grow in Arabia and Syria, and is tranſported from Alexandria to us. There is a baſtard ſena, which is kept in many gardens with us, commonly called *colutea*, which is its Latin name.

Government and Virtues. It is under the dominion of Mercury. The leaves of ſena (which only are uſed) are hot near the firſt degree, and dry in the third; it is of a purging faculty, but leaveth a binding quality after the purging; it openeth obſtructions, and cleanſeth and comforteth the ſtomach, being corrected with ſome anniſe-ſeed, carraway-ſeed, or ginger; it purgeth melancholy, choler, and phlegm, from the head and brain, lungs, heart, liver, and ſpleen, cleanſing thoſe parts of evil humours, a drachm thereof taken in wine, ale, or broth, faſting; it ſtrengthens the ſenſes, and procureth mirth: it is alſo good in chronical agues, whether quartan or quotidian; it cleanſeth and purifieth the blood, and cauſeth a freſh and lively habit of the body, and is a ſpecial ingredient in diet-drinks, and to make purging ale, to be taken to clarify and cleanſe the blood. The baſtard ſena works very violently both upwards and downwards, offending the ſtomach and bowels.

## SYCAMORE-TREE.

Kinds. THERE are two ſorts of this tree, the one bearing fruit out of the body and greater arms of the tree only, the other upon ſtalks without leaves. The firſt is called in Latin *ſycomorus* and *ficus Egyptia*, the Egyptian fig-tree, and is the true ſycamore-tree; thoſe trees which are vulgarly called ſycamores in England are a kind of maples.

Description. 1. This ſycamore groweth to be a very great tree, bigger than the mulberry-tree, with large arms and branches, full of round and ſomewhat long leaves, pointed at the ends, and dented about the edges, very like the leaves of the mulberry-tree; but harder and rougher, like fig-leaves; this beareth ſmall figs, or fruit, and no flower, differing in that from all other trees; for it bringeth forth the fruit out of the very body or trunk of the tree only, and the elder branches next to the body, and no where elſe; and are very like unto white or wild figs, and of the ſame bigneſs; but much ſweeter, and without any kernels. The whole tree, and every part, aboundeth with milk, if the bark be but gently wounded; but, if it be cut too deep, it yieldeth no milk at all; which maketh it to bear three or four times a year, new riſing out of the places where the old grew. The root is ſolid, hard, and black, and will abide freſh long after it is felled.

2. The other ſycamore is called *ſycomorus altera, ſeu ficus Cypria*, the ſycamore of Cyprus. This groweth to be as big as a plumb-tree, or white poplar-tree, the arms and branches bearing broad and ſomewhat round leaves, like unto the elm, but very like unto the former; this beareth ſuch-like fruit as figs, but ſmaller, which riſe both from the body and the greater arms, but not as the former; but on certain ſtalks in branches, which riſe by themſelves without any leaves with them; and are as ſweet as figs. They bear four times every year, but not unleſs they be ſlit, that the milk in them may come forth.

Place and Time. The firſt grows chiefly in Egypt, Syria, and Arabia, and other places adjacent; the other in Cyprus, Caria, Rhodes, and the neighbouring parts.

Government and Virtues. Theſe are under the particular influence of Venus. The fruit maketh the belly ſoluble, but by its overmuch moiſture it troubles the ſtomach, and giveth but little nouriſhment. The milk that is taken from the tree by gently piercing the bark, and afterwards dried and made into troches, and kept in an earthen pot, hath a property to ſoften tumours, and diſſolve them, and to ſolder and cloſe together the lips of green wounds. The fruit itſelf, being applied as a plaſter, worketh the ſame effect.

## SPIKNARD.

IT is naturally an Indian plant, called *nardus Indica*; therefore I ſhall proceed to declare its virtues, not troubling you at all with its deſcription.

Virtues. Spikenard is of a heating drying faculty, as ſaith Dioſcorides; it is good to provoke urine, and eaſeth pains of the ſtone in the reins and kidneys, being drunk in cold water; it helps loathings, ſwellings, or gnawing, in the ſtomach, the yellow-jaundice, and ſuch as are liver-grown. It is a good ingredient in mithridate and other antidotes againſt poiſon; to women with child it is forbidden to be taken inwardly. The oil of ſpikenard is good to warm cold places, and to digeſt crude and raw humours; it worketh powerfully on old cold griefs of the head and brain, ſtomach, liver, ſpleen, reins, and bladder. It purgeth the brain of rheum, being ſnuffed up the noſtrils; being infuſed certain days in wine, and then diſtilled in a hot bath, the water is good inwardly and outwardly to be uſed for any coldneſs of the members. It comforts the brain, and helps cold pains of the head, and the ſhaking palſy. Two or three ſpoonfuls thereof, being taken, help paſſions of the heart, ſwoonings, and the cholic; being drunk with wine, it is good againſt venomious bitings; and, being made into troches with wine, it may be reſerved for an eye-medicine, which, being aptly applied, repreſſeth obnoxious humours thereof.

## STORAX-TREE.

Kinds. THERE are accounted three ſorts of the ſtorax-tree, whoſe names ſhall follow with their deſcriptions.

Description. The uſual ſtorax-tree is called in Latin *ſtyrax arbor vulgaris.* This ſtorax-tree groweth very like the quince-tree, both for form and bigneſs, the leaves alſo are long and round, and ſomewhat like, but far leſs; whitiſh underneath, and ſtiff; the flowers ſtand both at the joints with the leaves, and at the ends of the branches, conſiſting of five or ſix large whitiſh leaves, like thoſe of the orange-tree, with ſome threads in the middle, after which come round berries, ſet in the cups that the flowers were in before, of the bigneſs of hazel-nuts, pointed at the ends, and hoary all over; each ſtanding on a long foot-ſtalk, containing within them certain kernels in ſmall ſhells. This yieldeth a moſt fragrant ſweet gum, and clear, of the colour of brown honey.

2. Storax with maple-leaves, *ſtyrax folio aceris.* From a round root, covered with a creſted or as it were a jointed bark, come forth, out of knots, three or five broad leaves, like thoſe of the maple or plane-tree, ſtanding on ſmall blackiſh long ſtalks, and are divided into three or five parts, full of veins, dented about the edges and pointed at the ends.

3. Red ſtorax, called in Latin *ſtyrax rubra.* This hath formerly by ſome been thought to be the bark of ſome kind of tree that went under the name of ſtorax. But Serapio and Avicen divide ſtorax into *liquida* and *ſicca:* by *liquida* meaning the pure gum flowing from the tree, and not that *liquida* which we now call by that name; and by the *ſicca* the fæces of the expreſſed oil from the fruit; but *calumita* is now taken of ſome to be red ſtorax.

Place and Time. The firſt groweth in Provence of France, in Italy, Candy, Greece, and ſome other parts of Turkey, where it yieldeth no gum; but in Syria, Silicia, Pamphilia, Cyprus, and thoſe hotter countries, it groweth much. It flowereth in the ſpring, yielding fruit in September.

Government and Virtues. This is a ſolar plant: there is no part of this tree in uſe with us, but the gum that iſſueth out of it; it is of temperature hot in the ſecond degree, and dry in the firſt; it heateth, mollifieth, and digeſteth; and is good for coughs, catarrhs, diſtillations of rheums, and hoarſeneſs. Pills made with it and a little turpentine, and taken, gently looſen the belly. It reſiſteth cold poiſons; dropped into the ears, it helpeth the ſingings and noiſe in them; applied to the hips, joints, or ſhoulders, afflicted with cold achs, it reſolveth and comforteth much, and is good to be put in baths, for lameneſs of the joints and wearineſs by travel. It is alſo good to put with white frankincenſe to perfume thoſe that have catarrhs, rheums, and defluxions from the head to the noſe, eyes, or other parts, by caſting it on quick coals and holding the head over the ſmoke. It diſſolveth hard tumours in any part, and is good for the king's evil.

## SWALLOW-WORT.

Kinds. OF this there are three kinds. The uſual Latin name of ſwallow-wort is *aſclepias* or *Venice toxicum*; their diſtinct names follow in their deſcriptions.

Description. 1. Swallow-wort with white flowers, *aſclepias flore albo.* This ſwallow-wort riſeth up with divers ſlender weak ſtalks to be two or three feet long, not eaſy to break, ſcarcely able to ſtand upright, and therefore for the moſt part leans or lies upon the ground, if it find not any thing to ſuſtain it; whereon are ſet two leaves at the joints, being ſomewhat broad and long pointed at the end; of a dark-green colour, and ſmooth at the edges. At the joints with the leaves, towards the tops of the ſtalks, and at the tops themſelves, come forth divers ſmall white flowers, conſiſting of five pointed leaves a-piece, of a ſweet ſcent; after which come ſmall long pods, thick above, in a great deal of white ſilken down, which when the pod is ripe openeth of itſelf, and ſheddeth both ſeed and cotton upon the ground, if it be not carefully gathered. The roots are a great buſh, of many ſtrings faſtened together at the head, ſmelling ſomewhat ſtrong while they are freſh and green, but more pleaſant when they are dried; both leaves and ſtalks periſh every winter, and ariſe anew in the ſpring of the year, when the ſtalks, at their firſt ſpringing are of a blackiſh brown.

2. Swallow-wort with black flowers, called in Latin *aſclepias flore nigro.* This groweth in the ſame manner that the former doth, having long ſlender rough branches, riſing out to a greater height than the other, and twining about whatſoever ſtandeth next unto them; having ſuch-like dark green leaves ſet by couples, but ſomewhat ſmaller, and of a dark-purpliſh colour: after which come more plentifully ſuch-like cods, with a white ſilver down and ſeeds in them as the former. The

roots hereof are not ſo buſhy as the other, neither ſmell ſo ſtrong; neither doth it give any milky but a watery juice when it is broken.

3. Swallow-wort of Candy, *aſclepias Cretica.* This riſeth up in the ſame faſhion as the former do, with many ſlender flexible green branches, with leaves ſet at the joints on either ſide, as the white kind hath, and are very like them, but ſomewhat of a paler white colour. The flowers ſtand in the ſame manner, three or four together upon a ſtalk, but are ſomewhat of a paler white colour; to whom ſucceed ſometimes but one pod, and ſometimes two together, thicker and ſhorter than thoſe of the white kind; ſtraked all along and double-forked at the ends, wherein lie ſilk and ſeeds as in the former; the roots have not ſo ſtrong a ſmell as the laſt, and have, as well as the reſt of the plant, a ſcent like box-leaves.

Place and Time. The two firſt grow in rough and untilled ground, upon divers mountains in France, about Narbonne, Marſeilles, and Montpelier, and in Italy alſo; the laſt in Candy. They flower in the months of June and July, and ſometimes not until Auguſt; and their cods are ripe about a month after; the empty huſks abide on the dry branches when the ſeed and ſilk are fallen out.

Government and Virtues. Theſe are ſolar plants; the roots have a moſt ſovereign faculty againſt all poiſons, particularly againſt the *apocynum,* or dog's-bane; and are effectually given to ſuch as are bitten by any venomous beaſt, or ſtung by any ſerpent or other creature; as alſo againſt the biting of a mad dog, a drachm and a half thereof taken in carduus-water for many days together. It is taken alſo, in wine, againſt the plague and peſtilence; a drachm taken in bugloſs-water is effectual againſt all paſſions of the heart; if the ſame quantity of citron-ſeeds be taken therewith, it eaſeth all the gripings pains in the belly; the decoction of the roots made with white wine, taken for ſeveral days together, a good draught at a time, and ſweating thereupon, cureth the dropſy. The ſame alſo cureth the jaundice, provoketh urine, and eaſeth the cough and all defects of the cheſt and lungs. The powder of the roots, taken with peony-ſeeds, is good againſt the falling ſickneſs; or with baſil-ſeed, or the rind of pomecitron-ſeeds, is good againſt melancholy; and, taken with the roots of *dictamus albus,* or baſtard dittany, will kill and expel worms. The decoction hereof, with comfrey-roots, made in wine, is good for thoſe that have a rupture, or are burſten, or have received hurts by bruiſes. The powder of the roots or leaves is effectual to cleanſe all putrid, rotten, and filthy, ulcers and ſores, and may ſafely be uſed in all ſalves, unguents, and lotions, made for ſuch purpoſes. The leaves and flowers boiled, and made into a poultice, and applied to the hard tumours or ſwellings of women's breaſts, cure them ſpeedily.

TOBACCO,

## TOBACCO, ENGLISH AND INDIAN.

Description. ENGLISH tobacco riſeth up with a thick round ſtalk, about two feet high, whereon grow thick fat green leaves, not ſo large as the Indian, round-pointed, and not dented about the edges; at the tops ſtand divers flowers in green huſks, ſcarcely above the brims of the huſk, round-pointed alſo, and of a greeniſh-yellow colour. Its ſeed is not very bright, but large, contained in great heads. The roots periſh every winter, but riſe generally of its own ſowing.

Names. It is called in Latin *petum* and *nicotiana*.

Place and Time. Engliſh tobacco groweth much about Winſcomb in Glouceſterſhire, as delighting in a fruitful ſoil; the other, which we ſmoke, groweth beſt in Virginia, and is thence carried to ſome parts of Spain, and there made up and then brought to us, and named Spaniſh tobacco.

Government and Virtues. It is a martial plant. It is found by good experience to be available to expectorate tough phlegm from the ſtomach, cheſt, and lungs; the juice thereof being made into a ſyrup, or the diſtilled water of the herb drunk; or the ſmoke taken by a pipe as is uſual, but faſting. The ſame helpeth to expel worms in the ſtomach and belly, and to eaſe the pains in the head, and the griping pains in the bowels; it is profitable for thoſe that are troubled with the ſtone in the kidneys, to eaſe pains, and, by provoking urine, to expel gravel and the ſtone; and hath been found very effectual to expel wind. The ſeed hereof is very effectual to help the tooth-ach, and the aſhes of the burnt herb to cleanſe the gums and make the teeth white. The herb bruiſed, and applied to the place grieved with the king's-evil, helpeth it in nine or ten days effectually. Monardus ſaith it is a counter-poiſon for the biting of any venomous creature, the herb alſo being outwardly applied to the hurt place. The diſtilled water is often given with ſome ſugar before the fit of an ague to leſſen it, and takes it away in three or four times uſing. If the diſtilled fæces of the herb, having been bruiſed before the diſtillation, and not diſtilled dry, be ſet in warm dung for fourteen days, and afterwards hung up in a bag in a wine-celler, the liquor that diſtils therefrom is ſingularly good for cramps, achs, the gout and ſciatica, and to heal itches, ſcabs, and running ulcers. The juice is alſo good for all the ſaid griefs, and likewiſe to kill lice in children's heads. The green herb, bruiſed and applied, cureth any freſh wound or cut whatſoever: and the juice, put into old ſores, both cleanſeth and healeth them. There is alſo made hereof a ſingular good ſalve to help impoſthumes, hard tumours, and ſwellings, by blows or falls.

## TAMARISK-TREE.

IT is ſo well known in the place where it groweth, that it needeth no deſcription.

Time. It flowereth about the end of May, or in June, and the ſeed is ripe and blown away in the beginning of September.

Government and Virtues. It is under the dominion of Saturn. If the root, leaves, or young branches, be boiled in wine or vinegar, and drunk, and applied outwardly,-it is very powerful againſt the hardneſs of the ſpleen. The leaves, boiled in wine and drunk, are good to ſtay the bleeding of the hemorrhoidal veins, ſpitting of blood, and helpeth the jaundice, the cholic, and the bitings of all venomous ſerpents except the aſp. The bark is as effectual, if not more, to all the purpoſes aforeſaid; and both it and the leaves boiled in wine, and the mouth and the teeth waſhed therewith, help the tooth-ach, the ear-ach, and the redneſs and watering of the eyes. The ſaid decoction, with ſome honey put thereto, is good to ſtay gangrenes and fretting ulcers, and to waſh thoſe that are ſubject to knits and lice. The wood is very effectual to conſume the ſpleen, and therefore to drink out of cups and cans made thereof is good for ſplenetic perſons. The aſhes of the wood are uſed for all the purpoſes aforeſaid; and, beſides, do quickly help the bliſters raiſed by burnings or ſcaldings by fire or water. Alpinus and Veſlingius affirm, that the Egyptians do with as good ſucceſs uſe the wood hereof to cure the French diſeaſe as others do lignum vitæ or guaiacum, and give it alſo to ſuch as are poſſeſſed with the leproſy, ſcabs, puſhes, ulcers, or the like; and it is available alſo to help the dropſy ariſing from the hardneſs and obſtruction of the ſpleen, as alſo for melancholy, and the black-jaundice, that ariſeth thereof.

## GARDEN TANSEY.

GARDEN TANSEY is ſo well known, that it needeth no deſcription.

Time. It flowerth in June and July.

Government and Virtues. Venus governs this herb. The herb bruiſed, and applied to the navel, ſtays miſcarriages; boiled in ordinary beer, and the decoction drunk, it doth the like; alſo it conſumes thoſe phlegmatic humours which the cold and moiſt conſtitution of winter uſually infects the body with, and that was the firſt reaſon of eating tanſey in the ſpring. The decoction of the common tanſey, or the juice drunk in wine, is a ſingular remedy for all the griefs that come by ſtopping of the urine, helpeth the ſtranguary, and thoſe that have weak reins and kidneys.

It is very profitable to diſſolve and expel wind in the ſtomach, belly, or bowels. If it be bruiſed, and often ſmelled to; as alſo, applied to the lower part of the belly, it is very profitable for ſuch women as are given to miſcarry in child-bearing, to cauſe them to go out their full time; it is uſed alſo againſt the ſtone in the reins, eſpecially to men. The herb fried with eggs, which is called a tanſey, helpeth to digeſt, and carry downward, thoſe bad humours that trouble the ſtomach. Being boiled in oil, it is good for the ſinews ſhrunk by cramps, or pained with cold. The ſeed is very profitably given to children for worms, and the juice in drink is as effectual; and it is in this laſt capacity that it is principally to be regarded. No complaint is ſo frequent, and few bring on ſo much miſchief: beſides the more common and obvious diſorders which they occaſion, a waſting, even to death, and putrid fevers, ſometimes accompany, and indeed ariſe from, them; and, oftener than is thought, they are the cauſe of epileptic fits. The medicines given againſt them are for the moſt part ineffectal, and many of them miſchievous. Hellebore has brought on convulſions; and every one knows the danger of mercurials.

## WILD TANSEY, OR SILVER-WEED.

THIS is ſo well known, that it needeth no deſcription.

Place. It groweth almoſt in every place.

Time. It flowereth in June and July.

Government and Virtues. This is likewiſe an herb of Venus. Wild tanſey ſtayeth the laſk, and all the fluxes of blood, in men or women, which ſome ſay it will do if the green herb be worn in the ſhoes, ſo it be next the ſkin; it ſtayeth alſo ſpitting or vomiting of blood. It is much commended to help children that are burſten, and have a rupture, being boiled in water and ſalt. Being boiled in wine and drunk, it eaſeth the griping pains of the bowels, and is good for the ſciatica and joint-achs. The ſame boiled in vinegar with honey and allum, and gargled in the mouth, eaſeth the pains of the tooth-ach, faſteneth looſe teeth, helpeth the gums that are ſore, and ſettled the palate of the mouth in its place when it is fallen down. It cleanſeth and healeth the ulcers in the mouth or ſecret parts, and is very good for inward wounds, and to cloſe the lips of green wounds; as alſo to heal old, moiſt, corrupt, running, ſores, in the legs or elſewhere. Being bruiſed and applied to the ſoles of the feet, and the wriſts, it wonderfully cooleth the hot fits of agues, be they never ſo violent. The diſtilled water cleanſeth the ſkin of all diſcolourings therein, as morphew, ſun-burning, &c. as alſo pimples, freckles, and the like; and, dropped into the eyes, or cloths wet therein and applied, taketh away the heat and inflammations in them.

## THISTLES.

OF theſe are many kinds growing here in England, which are ſo well known, that they need no deſcription. Their difference is eaſily known by the places where they grow, viz.

Place. Some grow in fields, ſome in meadows, and ſome among the corn; others on heaths, greens, and waſte grounds, in many places.

Time. They all flower in July and Auguſt, and their ſeed is ripe quickly after.

Government and Virtues. Mars rules them. Thiſtles are good to provoke urine, and to amend the rank ſmell of the arm-pits, or of the whole body, being boiled in wine and drunk, and are ſaid alſo to help a ſtinking breath, and to ſtrengthen the ſtomach. Pliny ſaith, that the juice bathed on the place that wanteth hair, it being fallen off, will cauſe it to grow again ſpeedily.

## MELANCHOLY THISTLE.

Description. IT riſeth up with a tender ſingle hoary green ſtalk, bearing thereon four or five long hoary green leaves, dented about the edges, the points whereof are little or nothing prickly, and at the top uſually but one head, yet ſometimes from the boſom of the uppermoſt leaf there ſhooteth forth another ſmaller head, ſcaly and ſomewhat prickly, with many reddiſh purple thrums, in the middle, which, being gathered freſh, will keep the colour a great while, and fade not from the ſtalk in a long time, while it perfecteth the ſeed. The root hath many long ſtrings faſtened to the head, or upper parts, which is blackiſh, and periſheth not.

There is another ſort, little differing from the former, but that the leaves are more green above and more hoary underneath, and the ſtalk, being about two feet high, bearing but one large ſcaly head, with threads and ſeeds as the former.

Place. They grow in many moiſt meadows of this land, as well in the ſouthern as in the northern parts.

Time. They flower about July or Auguſt, and their ſeed ripeneth quickly after.

Government and Virtues. It is under Capricorn, and therefore under both Saturn and Mars; one rids melancholy by ſympathy, the other by antipathy. Their virtues are but few, but thoſe not to be deſpiſed; for the decoction of the thiſtle in wine, being drunk, expels ſuperfluous melancholy out of the body, and makes a man merry. Superfluous melancholy cauſeth care, fear, ſadneſs, deſpair, envy, and many evils beſides: but religion teacheth to wait upon Providence, and caſt our care upon him who careth for us.

## OUR LADY's THISTLE.

Description. OUR lady's thiſtle hath divers large and broad leaves, lying on the ground, cut in and as it were crumpled, but rather hairy on the edges; of a white-green ſhining colour, wherein are many lines and ſtrakes of a milky white colour running all over, and ſet about with many ſharp and ſtiff prickles, among which riſeth up one or more ſtrong, round, and prickly, ſtalks, ſet full of the like leaves up to the top, where, at the end of every branch, cometh forth a great, prickly, thiſtle-like, head, ſtrongly armed with pricks, and with bright purple thrums riſing out of the middle of them; after they are paſt, the ſeed groweth in the ſaid heads, lying in a great deal of ſoft white down, which is ſomewhat flattiſh and ſhinning, large and brown. The root is great, ſpreading in the ground, with many ſtrings and ſmall fibres faſtened thereto. All the whole plant is bitter in taſte.

Place. It is frequent on the bank of almoſt every ditch.

Time. It flowerth and ſeedeth in June, July, and Auguſt.

Government and Virtues. Our lady's thiſtle is under Jupiter, and thought to be as good as cardus benedictus for agues, and to prevent and cure the infection of the plague, as alſo to open obſtructions of the liver and ſpleen, and thereby is good againſt the jaundice. It provoketh urine, breaketh and expelleth the ſtone, and is good for the dropſy. It is effectual alſo for the pains in the ſides, and many other inward pains and gripings. The ſeed and diſtilled water are held powerful to all the purpoſes aforeſaid: and, beſides, it is often applied both inwardly to drink, and outwardly with cloths or ſpunges to the region of the liver, to cool the diſtemperature thereof, and to the region of the heart, againſt ſwoonings and paſſions of it. It cleanſeth the blood exceedingly; and in ſpring, if you boil the tender plant, it will change your blood as the ſeaſon changes, which is a very ſure way to preſerve health.

## WOOLLY or COTTON THISTLE.

Description. THIS hath many large leaves lying on the ground, ſomewhat cut in, and as it were crumpled, on the edges, of a green colour on the upper-ſide, but covered over with a long hairy wool, or cottony down, ſet with ſharp pricks;

from the middle of whoſe heads of flowers come forth many purpliſh-crimſon threads, ſometimes white, although but ſeldom. The ſeed, that followeth in theſe white downy heads, is ſomewhat large, long, and round, reſembling the ſeed of our lady's thiſtle, but paler. The root is great and thick, ſpreading much, yet uſually dieth after ſeed-time.

Place. It groweth on divers ditch-banks, and in the corn-fields, and highways, generally throughout England; and is often found growing in gardens.

Time. It flowereth and beareth ſeed about the end of ſummer, when other thiſtles flower and ſeed.

Government and Virtues. It is a plant of Mars. Dioſcorides and Pliny write, that the leaves and roots hereof, taken in drink, help thoſe that have a crick in their neck, that they cannot turn it unleſs they turn their whole body. Galen ſaith, that the roots and leaves hereof are good for ſuch perſons as have their bodies drawn together by ſome ſpaſm or convulſion, or other infirmities, as the rickets in children; being a diſeaſe that hindereth their growth, by binding their nerves, ligaments, and whole ſtructures of their body.

## FULLERS THISTLE, OR, TEASEL.

IT is ſo well known, that it needs no deſcription, being uſed by the cloth-workers.

The wild teaſel is in all things like the former, but that the prickles are ſmall, ſoft, and upright, not hooked or ſtiff: and the flowers of this are of a fine bluſh or pale carnation colour, but of the manured kind whitiſh.

Place. The firſt groweth, being ſown, in gardens or fields, for the uſe of cloth-workers. The other near ditches in many places of Great Britain.

Time. They flower in July, and are ripe near the end of Auguſt.

Government and Virtues. It is an herb of Venus. Dioſcorides ſaith, that the root bruiſed and boiled in wine until it be thick, and kept in a brazen veſſel or pot, and after ſpread as a ſalve and applied, doth heal fiſtulas, and alſo taketh away warts and wens. Boiled in wine, it purgeth by urine. The juice of the leaves, dropped into the ears, killeth worms in them. The diſtilled water of the leaves, dropped into the eyes, taketh away redneſs and miſts in them that hinder the ſight, and is often uſed by women to preſerve their beauty, and to take away redneſs and inflammations, and all other diſcolourings. The water alſo, that is received in the hollowneſs of the leaves, is good for the ailments for which the diſtilled water is recommended.

## TREACLE-MUSTARD.

Description. IT riſeth up with a hard round ſtalk about a foot high, parted into ſome branches, having divers ſoft green leaves ſomewhat long and narrow ſet thereon, waved, but not cut in on the edges, broadeſt towards the ends, and ſomewhat round-pointed; the flowers are white that grow at the tops of the branches, ſpike-faſhion, one above another: after which come large round pouches parted in the middle with a furrow, having one blackiſh-brown ſeed on either ſide, ſomewhat ſharp in taſte, and ſmelling of garlic, eſpecially in the fields where it is natural, but not ſo much in gardens: the roots are ſmall and thready, periſhing every year.

## BLACK-THORN, OR SLOE-BUSH.

IT is ſo well known, that it needeth no deſcription.

Place. It groweth in every country, in the hedges and borders of fields.

Time. It flowereth in April, and ſometimes in March, but ripeneth after all other plumbs whatſoever, and is not fit to be eaten until the autumn froſts have mellowed it.

Government and Virtues. All the parts of the ſloe-buſh are binding, cooling, and drying, and effectual to ſtay the bleeding at the noſe and mouth, or any place; the laſk of the belly, or ſtomach, or the bloody flux, and to eaſe the pains in the ſides or bowels, by drinking the decoction of the bark of the roots, or more uſually the decoction of the berries, either freſh or dried. The conſerve is alſo of very much uſe to the purpoſes aforeſaid; but the diſtilled water of the flowers, firſt ſteeped in ſack for a night, and drawn therefrom by the heat of a bath, is a moſt certain remedy, tried and approved, to eaſe all manner of gnawing in the ſtomach, ſides, and bowels, or any griping pains in any of them, to drink a ſmall quantity when the extremity of pain is upon them. The leaves alſo are good to make lotions, to gargle and waſh the mouth and throat, wherein are ſwellings, ſores, or kernels, and to ſtay the defluxions of rheum to the eyes or other parts, as alſo to cool the heat and inflammation in them, and to eaſe hot pains of the head, by bathing the forehead and temples therewith. The ſimple diſtilled water of the flowers is very effectual for the ſaid purpoſes, and the condenſate juice of the ſloes. The diſtilled water of the green berries is uſed alſo for the ſame purpoſes.

## THOROUGH-WAX, or THOROUGH-LEAF.

Description. COMMON thorough-wax ſendeth forth one ſtraight round ſtalk, and ſometimes more, two feet high and better, whoſe lower leaves, being of a bluiſh-green colour, are ſmaller and narrower than thoſe up higher, and ſtand cloſe thereto, not compaſſing it, but, as they grow higher, they more and more encompaſs the ſtalk, until it wholly (as it were) paſs through them, branching towards the top into many parts, where the leaves grow ſmaller again, every one ſtanding ſingly. The flowers are very ſmall and yellow, ſtanding in tufts at the heads of the branches, where afterwards grow the ſeed, being blackiſh, many thick thruſt together. The root is ſmall, long, and woody, periſhing every year after ſeed time, and riſing again plentifully of its own ſowing.

Place. It is found growing in many corn-fields and paſture-grounds in Great Britain.

Time. It flowereth in July, and the ſeed is ripe in Auguſt.

Government and Virtues. Both this and the former are under the influence of Saturn. Thorough-wax is of ſingular good uſe for all ſorts of bruiſes and wounds, either inward or outward, and old ulcers and ſores likewiſe, if the decoction of the herb with water or wine be drunk, and the places waſhed therewith, or the juice, or green herb bruiſed or boiled, either by itſelf or with other herbs, in oil or hog's-greaſe, be made into an ointment to ſerve all the year. The decoction of the herb, or the powder of the dried herb, taken inwardly, and the ſame, or the green leaves, bruiſed and applied outwardly, is ſingular good to cure ruptures and burſtings, eſpecially in children, before they be too old.

## THYME.

IT is very unneceſſary to deſcribe an herb ſo commonly known.

Government and Virtues. It is under the government of Venus. This herb is a notable ſtrengthener of the lungs; there is ſcarcely a better remedy growing for that diſeaſe in children which they commonly call the chin-cough. It purgeth the body of phlegm, and is an excellent remedy for ſhortneſs of breath: it kills worms in the belly. An ointment made of it takes away hot ſwellings and warts, helps the ſciatica and dulneſs of ſight, takes away pains and hardneſs of the ſpleen. It is excellent good for thoſe that are troubled with the gout; it eaſeth pains in the loins and hips. The herb taken any way inwardly comforts the ſtomach much, and expels wind.

WILD

## WILD THYME, OR MOTHER OF THYME.

THE wild thyme is ſo well known. that it needs no deſcription.

Place. It may be found in commons and other barren places throughout the nation.

Government and Virtues. This is likewiſe under the dominion of Venus, though under the ſign Aries, and therefore chiefly appropriated to the head: it provoketh urine, and eaſeth the griping pains of the belly, cramps, ruptures, and inflammations of the liver. If you make a vinegar of the herb, and anoint the head with it, it will ſoon eaſe the pain thereof. It is excellent good to be given either in a frenzy or lethargy, although they are two contrary diſeaſes. It helps the ſpitting of blood, coughing, and vomiting; it comforts and ſtrengthens the head, ſtomach, reins, and womb; expels wind, and breaks the ſtone.

## TORMENTIL, OR SEPTFOIL.

Description. THIS hath many reddiſh, ſlender, weak, branches, riſing from the root, lying upon the ground, rather leaning than ſtanding upright, with many ſhort leaves that ſtand cloſer to the ſtalks than cinquefoil doth, (which this is very like,) with the foot-ſtalk encompaſſing the branches in ſeveral places; but thoſe that grow next to the ground are ſet upon long foot-ſtalks, each whereof are like the leaves of cinquefoil, but ſomewhat longer and ſmaller, and dented about the edges, many of them divided into five leaves only, but moſt of them into ſeven, whence it is called ſeptfoil; yet ſome may have ſix, and ſome eight, according to the fertility of the ſoil. At the tops of the branches ſtand divers ſmall yellow flowers, conſiſting of five leaves, like thoſe of cinquefoil, but ſmaller. The root is ſmaller than biſtort, ſomewhat thick, but blacker without, and not ſo red within, yet ſometimes a little crooked, having many blackiſh fibres.

Place. It groweth as well in woods and ſhadowy places as in the open country, about the borders of fields in many places of England, and almoſt in every broom-field in Eſſex.

Time. It flowereth all the ſummer.

Government and Virtues. This is an herb of the Sun. Tormentil is moſt excellent to ſtay all kinds of fluxes of blood or humours in man or woman, whether at noſe, mouth, belly, or any wound in the veins or elſewhere. The juice of the herb or root, taken in drink, not only reſiſteth all poiſon or venom of any creature, but of the plague itſelf, and peſtilential fevers, and contagious diſeaſes, as the French diſeaſe, meaſles, purples, &c. expelling the venom and infection from the heart by perſpiration; if the green root be not to be had, the powder of the dry root is as effectual, a drachm thereof being taken every morning. The decoction likewiſe of the herb and roots made in wine, and drunk, worketh the ſame effect; and ſo doth the diſtilled water of the herb and root, being ſteeped in wine for a night, and then diſtilled in *balneo mariæ*. The water thus diſtilled, taken with ſome Venice treacle, and the party preſently laid to ſweat, will expel any venom or poiſon, or the plague, fever, &c. for it is an ingredient of eſpecial reſpect in all antidotes or counter-poiſons. There is not found any root more effectual to help any flux of the belly, ſtomach, ſpleen, or blood, than this, to be taken inwardly, or applied outwardly. The juice doth wonderfully open obſtructions of the liver and lungs, and thereby in ſhort ſpace helpeth the yellow-jaundice: ſome make cakes hereof, as well to ſtay all fluxes as to reſtrain all choleric belchings, and much vomiting, with loathing. Andreas Valeſius is of opinion, that the decoction of this root is no leſs effectual to cure the venereal diſeaſe than guaiacum; and it is not unlikely, becauſe it ſo mightily reſiſteth putrefaction. Lobel ſaith, that Rondeletius uſed it as harmodactils for joint-achs: the powder alſo, or decoction to be drunk, or to ſit therein as a bath, is a fine remedy againſt abortion in women, if it proceed from the weakneſs of the inward retentive faculty: as alſo a plaiſter made therewith and vinegar, applied to the reins of the back, doth much help, not only this, but alſo thoſe that cannot hold their water, the powder being taken in the juice of plantane; and it is alſo commended againſt the worms in children. It is very powerful in ruptures and burſtings; as alſo to bruiſes and falls, to be uſed as well outwardly as inwardly. The root hereof, made up with pellitory of Spain and allum, and put into an hollow tooth, not only aſſuageth pain, but ſtayeth the flux of humours which cauſed it. Tormentil is no leſs effectual and powerful a remedy for outward wounds, ſores, and hurts, than for inward, and is therefore a ſpecial ingredient in wound-drinks, lotions, and injections, for foul, corrupt, rotten, ſores and ulcers of the mouth, or any other parts of the body; and to put either the juice or powder of the root into ſuch ointments, plaiſters, and ſuch things as are to be applied to wounds and ſores. It alſo diſſolveth all knots, kernels, and hardneſs, about the ears, throat, and jaws; and the king's evil, if the leaves and roots be bruiſed and applied thereto. The ſame alſo eaſeth the pains of the ſciatica, or hip-gout, by reſtraining the ſharp humours that flow thereto. The juice of the leaves and roots, uſed with a little vinegar, is alſo a ſpecial remedy againſt the running ſores of the head or other parts, ſcabs alſo, and the itch, or any ſuch eruptions in the ſkin, proceeding of ſalt and ſharp humours. The ſame alſo is effectual for the piles, or hemorrhoids, if they be waſhed and bathed therewith, or with the diſtilled water of the herb and root. It is found alſo helpful to dry up any ſharp rheum that diſtilleth from the head into the eyes, cauſing redneſs, pain, waterings, itchings, or the like, if a little prepared tutia, or white amber, be uſed with the diſtilled water thereof. The Sun rules this herb.

## TURNSOL, OR HELIOTROPIUM.

Description. THE greater turnſol riſeth up with one upright ſtalk about a foot high or more, dividing itſelf almoſt from the bottom into ſmaller branches of a hoary colour. At each joint of the ſtalk and branches grow two ſmall broad leaves, ſomewhat white or hoary. At the top of the ſtalks and branches ſtand many ſmall white flowers, conſiſting of four and ſometimes five very ſmall leaves, ſet in order one above another, upon a ſmall crooked ſpike, which turneth inwards, opening by degrees as the flowers blow open; after which in their places come forth ſmall cornered ſeeds, four for the moſt part ſtanding together. The root is ſmall and thready, periſhing every year; and the ſeed, ſhedding every year, raiſes it again the next ſpring.

Place. It groweth in gardens, and flowereth and ſeedeth with us in England, notwithſtanding it is not natural to Great Britain, but to Italy, Spain, and France, where it groweth plentifully.

Government and Virtues. It is an herb of the Sun. Dioſcorides ſaith, that a good handful of this, which is called the greater turnſol, boiled in water, and drunk, purgeth both choler and phlegm; and, boiled with cummin, and drunk, helpeth the ſtone in the reins, kidneys, or bladder, provoketh urine and the courſes, and cauſeth an eaſy and ſpeedy delivery in child-birth. The leaves bruiſed and applied to places pained with the gout, or that have been newly ſet, do give much eaſe. The ſeed and the juice of the leaves alſo being rubbed with a little ſalt upon warts, wens, and other hard kernels, in the face, eye-lids, or any other part of the body, will, by often uſing, take them away.

## MEADOW TREFOIL, OR HONEY-SUCKLES.

IT is ſo well known, eſpecially by the name of honey-ſuckles, white and red, that I need not deſcribe them.

Place. They grow almoſt every where in England.

Government and Virtues. Mercury hath dominion over the common ſorts. Dodoneus ſaith, the leaves and flowers are good to eaſe the griping pains of the guts, the herb being boiled and uſed in a clyſter. If the herb be made into a poultice and applied to inflammations, it will eaſe them. The juice dropped into the eyes is a familiar medicine with many country people to take away the pin and web (as they call it) in the eyes; it alſo allayeth the heat and blood-ſhooting of them. Country people do alſo in many places drink the juice hereof againſt the biting of an adder, and, having boiled the herb in water, they firſt waſh the place with the decoction, and then lay ſome of the herb to the hurt place. The herb alſo, boiled in ſwine's-greaſe, and ſo made into an ointment, is good to apply to the biting of any venomous creature. It is held likewiſe to be good for wounds. The ſeed and flowers boiled in water, and after made into a poultice with ſome oil, and applied, help hard ſwellings and impoſthumes.

## HEART TREFOIL.

BESIDES the ordinary ſorts of trefoil, there are two more remarkable, and one of which may probably be called the heart trefoil, not only becauſe the leaf is triangular like the heart of a man, but alſo becauſe each leaf contains the perfection of a heart, and that in its proper colour, viz. a fleſh-colour.

Place. It groweth near Bow, and parts adjacent.

Government and Virtues. It is under the dominion of the Sun; and, if it were uſed, it would be found as great a ſtrengthener of the heart and cheriſher of the vital ſpirits as grows, relieving the body againſt faintings and ſwoonings, fortifying it againſt poiſons and peſtilence, and defending the heart againſt the noiſome vapours of the ſpleen.

## PEARL TREFOIL.

IT differs not from the common ſort, ſave only in this one particular, that it hath a white ſpot in the leaf like a pearl; it is particularly under the dominion of the Moon, and its icon ſheweth that it is of ſingular virtue againſt the pearl, or pin and web, in the eye.

## TUTSAN, or PARK-LEAVES.

Description. It hath browniſh ſhining ſtalks, creſted all the length thereof, riſing to be two and ſometimes three feet high, branching forth even from the bottom, having divers joints, and at each of them two fair large leaves, of a dark bluiſh-green colour on the upper-ſide, and of a yellowiſh-green underneath, turning

ing reddiſh towards autumn, but abiding on the branches all the winter. At the tops of the ſtalks and branches ſtand large yellow flowers, and heads with ſeed, which being greeniſh at the firſt, and afterwards reddiſh, turn to be of a blackiſh-purple colour when they are thoroughly ripe, with ſmall browniſh ſeed in them, and then yield a reddiſh juice or liquor, of a reaſonable good ſcent, ſomewhat reſinous, and of an harſh and ſtyptic taſte, as the leaves alſo and the flowers be, although much leſs: The root is of a browniſh colour, ſomewhat great, hard, and woody, ſpreading well in the ground.

Place. It groweth in many woods, groves, and woody-grounds, as parks and foreſts, and by hedge ſides, in many places in Great Britain.

Time. It flowereth later than St. John's or St. Peter's wort.

Government and Virtues. It is an herb of Saturn, and a great antivenerean. Tutſan purgeth choleric humours, as St. Peter's wort is ſaid to do; for therein it worketh the ſame effects, both to help the ſciatica and gout, and to heal burnings by fire. It ſtayeth alſo the bleeding of wounds, if either the green herb be bruiſed or the powder of the dry be applied thereto. It hath been accounted, and certainly is, a ſovereign herb to heal any wound or ſore either outwardly or inwardly, and therefore always uſed in drinks, lotions, balms, oils, ointments for any ſort of green wound, or old ulcers and ſores, in all which the continual experience of former ages hath confirmed the uſe thereof to be admirably good, though it be not ſo much in uſe now as when phyſicians and ſurgeons were ſo wiſe as to uſe herbs more than they do at preſent.

## GARDEN VALERIAN.

Description. THIS hath a thick ſhort greyiſh root, lying for the moſt part above ground, ſhooting forth on all ſides other ſuch-like ſmall pieces or roots, which have all of them many long and great ſtrings or fibres under them, in the ground, whereby it draweth nouriſhment. From the heads of theſe roots ſpring up many green leaves, which at firſt are ſomewhat broad and long, without any diviſion at all in them, or dented on the edges; but thoſe that riſe up after are more and more divided on each ſide, ſome to the middle-rib, made of many leaves together on a ſtalk, and thoſe upon the ſtalk in like manner more divided, but ſmaller towards the top than below. The ſtalk riſeth to be a yard high or more, ſometimes branched at the top, with many ſmall whitiſh flowers, ſometimes daſhed over at the edges with a pale purpliſh colour of a little ſcent; which paſſing away, there followeth ſmall browniſh-white ſeed that is eaſily carried away with the wind. The root ſmelleth more ſtrong than either leaf or flower, and is of more uſe in medicine.

PLACE. It is generally kept with us in our gardens.

TIME. It flowereth in June and July, and continueth flowering until the froſt pulls it down.

GOVERNMENT AND VIRTUES. This is under the influence of Mercury. Dioſcorides ſaith, that the garden valerian hath a warming faculty, and that, being dried and given to drink, it provoketh urine, and helpeth the ſtranguary. The decoction thereof, taken, doth the like alſo, and taketh away pains of the ſides, provoketh urine, and helpeth the ſtranguary. It is uſed likewiſe as a counter-poiſon. Pliny ſaith, that the powder of the root given in drink, or ſome of the decoction thereof taken, helpeth all ſtoppings and ſtranglings in any part of the body, whether they proceed of pains in the cheſt or ſides, and taketh them away. The root of valerian, boiled with liquorice, raiſins, and aniſe-ſeed, is good for thoſe that are ſhort winded, and for thoſe that are troubled with a cough, and helpeth to open the paſſages, and to expectorate phlegm eaſily. It is given to thoſe that are bitten or ſtung by any venomous creature, being boiled in wine. It is of ſpecial virtue againſt the plague, the decoction thereof being drunk, and the root being uſed to ſmell to; it helpeth alſo to expel wind. The green herb with the root taken freſh, being bruiſed and applied to the head, taketh away the pains and prickings therein, ſtayeth rheum and thin diſtillations; and, being boiled in white wine, and a drop thereof put into the eye, taketh away the dimneſs of the ſight, or any pin or web therein. It is of excellent property to heal any inward ſores or wounds, as alſo for outward hurts or wounds, and draweth any ſplinters or thorns out of the fleſh.

## VERVAIN.

DESCRIPTION. THE common vervain hath ſomewhat long and broad leaves next the ground, gaſhed about the edges, and ſome only deeply dented, or cut all alike, of a blackiſh-green colour on the upper ſide, and ſomewhat grey underneath. The ſtalk is ſquare, branched into ſeveral parts, riſing about two feet high, eſpecially if you reckon the long ſpikes of flowers at the tops of them, which are ſet on all ſides one above another, and ſometimes two or three together, being ſmall and gaping, of a purpliſh blue colour, and white intermixed; after which come ſmall round ſeed in ſmall and ſomewhat long heads. The root is ſmall and long, but of no uſe.

PLACE. It groweth generally throughout England, in divers places by the hedges, and way-ſides, and other waſte grounds.

TIME. It flowereth about July, and the ſeed is ripe ſoon after.

Government and Virtues. This alſo is an herb of Venus, and an excellent herb for the womb, to ſtrengthen it, and remedy all the cold griefs of it, as plantane doth the hot. The herb bruiſed, and hung about the neck, helps the head-ach. Vervain is hot and dry, bitter, opening obſtructions, cleanſing and healing. It helpeth the yellow-jaundice, the dropſy, and the gout, the defects of the reins and lungs, and generally all inward pains and torments of the body, the leaves being boiled and drunk. The ſame is held to be good againſt the bitings of ſerpents, and other venomous beaſts; and againſt the plague, and both tertian and quartan agues; killeth and expelleth worms in the belly, and cauſeth a good colour in the face and body; ſtrengtheneth as well as correcteth the diſeaſes of the ſtomach and lungs, coughs, ſhortneſs of breath, and wheeſings, and is ſingularly good againſt the dropſy, to be drunk with ſome peony-ſeed bruiſed and put thereto; and is no leſs prevalent for the defects of the reins and bladder, to cleanſe them of thoſe humours that ingender the ſtone; and helpeth to break the ſtone, and to expel gravel. It conſolidateth and healeth alſo all wounds both inward and outward, and ſtayeth bleedings; and, uſed with ſome honey, healeth all old ulcers and fiſtulas in the legs or other parts of the body, as alſo thoſe ulcers that happen in the mouth; or, uſed with old hog's-greaſe, it helpeth the ſwellings and pains of the ſecret parts in man or woman, as alſo the piles and hemorrhoids. Applied with ſome oil of roſes and vinegar unto the forehead and temples, it eaſeth the inveterate pains and achs of the head. The leaves bruiſed, or the juice of them mixed with ſome vinegar, doth wonderfully cleanſe the ſkin, and taketh away morphew, freckles, and other ſuch-like inflammations and deformities of the ſkin, in any part of the body. The diſtilled water of the herb, when it is in its full ſtrength, dropped into the eyes, cleanſeth them from films, clouds, or miſts, that darken the ſight, and wonderfully ſtrengtheneth the optic nerves. The ſaid water is very powerful in all the diſeaſes aforeſaid either inward or outward, whether they be old corroding ſores, or green wounds.

## VINE.

Virtues. THE leaves of the Engliſh vine, being boiled, make a good lotion for ſore mouths; being boiled with barley-meal into a poultice, it cools inflammations of wounds; the droppings of the vine when it is cut in the ſpring, which country people call tears, being boiled into a ſyrup with ſugar and taken inwardly, are good to ſtay women's longings; alſo the tears of the vine drunk, two or three ſpoonfuls at a time, break the ſtone in the bladder. This is a very good remedy; but the ſalt of the leaves is held to be better. The aſhes of the burnt branches will make teeth that are black as a coal to be as white as ſnow, if you do but every morning rub them with it. It is a tree of the Sun, very ſympathetical with the body of man.

## VIOLETS.

BOTH the tame and wild are ſo well known, that they need no deſcription.

Time. They flower until the end of July, but are beſt in March and the beginning of April.

Government and Virtues. They are a fine pleaſing plant of Venus, of a mild nature, no way harmful. All the violets are cold and moiſt while they are freſh and green, and are uſed to cool any heat or diſtemperature of the body either inwardly or outwarly, as inflammations in the eyes, &c. impoſthumes alſo, and hot ſwellings, to drink the decoction of the leaves or flowers made with water and wine, or to apply them poultice-wiſe to the grieved place; it likewiſe eaſeth pains in the head cauſed through want of ſleep, being applied in the ſame manner, or with oil of roſes. A drachm-weight of the dried leaves or flowers of violets, (but the leaves more ſtrongly,) doth purge the body of choleric humours, and aſſuageth the heat, being taken in a draught of wine or any other drink. The powder of the purple leaves of the flowers only, picked and dried, and drunk in water, it is ſaid to help the quinſey, and the falling ſickneſs in children, eſpecially in the beginning of the diſeaſe. The flowers of the white violets open and diſſolve ſwellings.

## VIPERS BUGLOSS.

Description. THIS hath many long rough leaves lying on the ground, from among which riſe up divers hard round ſtalks, very rough as if they were thick ſet with prickles or hairs, whereon are ſet long, rough, hairy, or prickly, ſad-green leaves, ſomewhat narrow, the middle-rib for the moſt part being white. The flowers ſtand at the top of the ſtalks, branched forth into many long ſpiked leaves of flowers, bowing or turning like the turnſol, all of them opening for the moſt part on the one ſide, which are long and hollow, turning up the brims a little, of a purpliſh violet colour in them that are fully blown, but more reddiſh while they are in the bud, as alſo upon their decay and withering; but in ſome places of a paler purple colour with a long pointel in the middle, feathered or parted at the top. After the flowers are fallen, the ſeeds, growing to be ripe, are blackiſh, cornered, and pointed, ſomewhat like the head of a vine. The root is ſomewhat great, and blackiſh, and woolly, when it groweth toward ſeed-time; and periſheth in the winter.

There is another ſort, little differing from the former, only in that it beareth white flowers.

Place. The firſt groweth wild almoſt every where. That with white flowers about Lewis, in Suſſex.

Time. They flower in ſummer, and their ſeed is ripe quickly after.

Government and Virtues. This is an herb of the Sun. It is an eſpecial remedy againſt the biting of the viper and all other venomous beaſts or ſerpents, as alſo againſt poiſon and poiſonful herbs. Dioſcorides and others ſay, that whoever ſhall take of the herb or root before they be bitten, ſhall not be hurt by the poiſon of any ſerpent. The roots or ſeed are thought to be moſt effectual to comfort the heart, and expel ſadneſs, or cauſe leſs melancholy; it tempers the blood, and allayeth hot fits of agues. The ſeed drunk in wine procureth abundance of milk in women's breaſts. The ſame alſo eaſeth the pains in the loins, back, and kidneys. The diſtilled water of the herb, when it is in flower, is excellent to be applied, either inwardly or outwardly, for all the griefs aforeſaid. There is a ſyrup made hereof, very effectual for comforting the heart, and expelling ſadneſs and melancholy.

## WALL-FLOWERS, or WINTER GILLY-FLOWERS.

THE garden kinds are ſo well known, that they need no deſcription.

Description. The common ſingle wall-flowers, which grow wild abroad, have ſundry ſmall, long, narrow, and dark-green, leaves; ſet without order upon ſmall round whitiſh woody ſtalks, which bear at the tops divers ſingle yellow flowers one above another, every one having four leaves a-piece, and of a very ſweet ſcent: after which come long pods containing reddiſh ſeed. The root is white, hard, and thready.

Place. It groweth upon church walls, and other ſtone walls in divers places. The other ſorts in gardens only.

Time. All the ſingle kinds do flower in the end of autumn; and, if the winter be mild, eſpecially in the months of February, March, and April, and until the heat of the ſpring do ſpend them; but the double kinds continue not flowering in that manner all the year long, although they flower very early ſometimes, and in ſome places very late.

Government and Virtues. The Moon rules them. Galen, in his ſeventh book of ſimple medicines, ſaith, that the yellow wall-flowers work more powerfully than any of the other kinds, and are therefore of more uſe in phyſic. They cleanſe the blood and free the liver and reins from obſtructions, ſtay inflammations and ſwellings, comfort and ſtrengthen any weak part, or out of joint; help to cleanſe the eyes from miſtineſs and films, and to cleanſe foul and filthy ulcers in the mouth, or any other part, and are a ſingular remedy for the gout, and all achs and pains in the joints and ſinews. A conſerve made of the flowers is uſed for a remedy both for the apoplexy and palſy.

## WALNUT-TREE.

IT is ſo well known, that it needeth no deſcription.

Time. It bloſſometh early, before the leaves come forth; and the fruit is ripe in September.

Government and Virtues. This is a plant of the Sun; let the fruit of it be gathered accordingly, which you ſhall find to be of moſt virtue whilſt they are green, before they have ſhells. The bark of the tree doth bind and dry very much, and the leaves are much of the ſame temperature; but the leaves, when they are older, are heating and drying in the ſecond degree, and harder of digeſtion than when they are freſh, which by reaſon of their ſweetneſs are more pleaſing and better digeſting in the ſtomach; and, taken with ſweet wine, they move the belly downwards; but, being old, they grieve the ſtomach, and in hot bodies cauſe choler to abound, and the head-ach, and are an enemy to thoſe that have a cough; but are leſs hurtful to thoſe that have colder ſtomachs, and are ſaid to kill the broad worms in the belly or ſtomach. If they be taken with onions, ſalt, and honey, they help the biting of a mad dog, or the venom or infectious poiſon of any beaſt, &c. Coneus Pompeius found in the treaſury of Mithridates, king of Pontus, when he was overthrown, a ſcroll of his own hand-writing, containing a medicine againſt any poiſon and infection, which is this: take two dry walnuts, and as many good figs, and twenty leaves of rue, bruiſed and beaten together with two or three corns of ſalt, and twenty juniper berries, which, taken every morning faſting, preſerveth from danger of poiſon or infection that day it is taken. The juice of the outer green huſks, boiled up with honey, is an excellent gargle for ſore mouths, the heat and inflammations in the throat and ſtomach. The kernels, when they grow old, are more oily, and therefore not ſo fit to be eaten, but are then uſed to heal the wounds of the ſinews, gangrenes, and carbuncles. The ſaid kernels, being burned, are then very aſtringent, and will then ſtay laſks and womens courſes, being taken in red wine; and ſtay the falling of the hair, and make it fair, being anointed with oil and wine. The green huſks will do the like, being uſed in the ſame manner. The kernels, beaten with rue and wine, being applied, help the quinſey; and, bruiſed with honey, and applied to the ears, eaſe the pains and inflammations of them. A piece of the green huſk, put into a hollow tooth, eaſeth the pain. The oil that is preſſed out of the kernels, is very profitably taken inwardly, like oil of almonds, to help the cholic, and to expel wind; an ounce or two thereof may be taken at a time. The young green nuts, taken before they be half ripe, and preſerved with ſugar, are of good uſe for thoſe that have weak ſtomachs, or defluxions thereon. The diſtilled water of the unripe green huſk is of excellent uſe to cool the heat of agues, being drunk an ounce or two at a time, as alſo to reſiſt the infection of the plague, if ſome of it be alſo applied to the ſores thereof. The ſame likewiſe cooleth the heat of green wounds and old ulcers, and healeth them. The diſtilled water of the green huſks, when they are ſhelled from the nuts, being drunk with a little vinegar, is alſo found by experience to be good for thoſe that are infected with the plague, ſo as before the taking thereof a vein be opened. The ſaid water is very good againſt the quinſey, being gargled and bathed therewith, and wonderfully helpeth deafneſs, the noiſe and other pains in the ears. The diſtilled water of the young green leaves, in the end of May, performeth a ſingular cure on foul running ulcers and ſores, to be bathed with wet cloths or ſpunges applied to them every morning.

## WOLD, WELD, OR DYERS WEED.

Description. THE common kind groweth buſhing with many leaves, long, narrow, and flat upon the ground, of a dark bluiſh-green colour, ſomewhat like unto woad, but nothing ſo large; a little crumpled, and as it were round-pointed, which do ſo abide the firſt year: and, the next ſpring, from among them riſe divers round ſtalks two or three feet high, beſet with many ſuch-like leaves thereon, but ſmaller, and ſhooting forth ſome ſmall branches, which with the ſtalks carry many ſmall yellow flowers in a long ſpiked head at the tops of them, where afterwards comes the ſeed, which is ſmall and black, incloſed in heads that are divided at the tops into four parts. The root is long, white, and thick, abiding the winter. The whole herb changeth to be yellow after it hath been in flower a while.

Place. It groweth every where by the way ſides, in moiſt grounds as well as dry, in corners of fields and by-lanes, and ſometimes all over the field. In Suſſex and Kent they call it green-weed.

Time. It flowereth about June.

Government and Virtues. Mathiolus ſaith, that the root hereof cutteth tough phlegm, digeſteth raw phlegm, thinneth groſs humours, diſſolveth hard tumours, and openeth obſtructions. Some highly commend it againſt the bitings of venomous creatures, to be taken inwardly, and applied outwardly to the hurt place; as alſo for the plague or peſtilence. The people in ſome parts of England bruiſe the herb, and lay it to cuts or wounds in the hands or legs.

## WHEAT.

ALL the ſeveral kinds hereof are ſo well known unto all people, that a deſcription is unneceſſary.

Government and Virtues. It is under Venus. Dioſcorides ſaith, that to eat the corns of green wheat is hurtful to the ſtomach, and breedeth worms. Pliny ſaith, that the corns of wheat roaſted upon an iron pan, and eaten, are a preſent remedy for thoſe that are chilled with cold. The oil, preſſed from wheat between two thick plates of iron or copper heated, healeth all tetters and ring-worms, being uſed warm, and hereby Galen ſaith he hath known many to be cured. Mathiolus commendeth the ſame oil to be put into hollow ulcers to heal them up, and it is good for chops in the hands or feet, and to make a rugged ſkin ſmooth. The green corns of wheat being chewed, and applied to the place bitten by a mad dog, heal it: ſlices of wheat bread ſoaked in red roſe-water, and applied to the eyes that are hot, red, inflamed, or blood-ſhotten, help them. Hot bread, applied for an hour at a time for three days together, perfectly healeth the kernels in the throat commonly called the king's evil. The flour of wheat, mixed with the juice of henbane, ſtayeth the flux of humours to the joints, being laid thereon. The ſaid meal boiled in vinegar, helpeth the ſhrinking of the ſinews, ſaith Pliny; and, mixed with vinegar and honey boiled together, healeth all freckles, ſpots, and pimples, on the face. Wheat-flour mixed with the yolk of an egg, honey, and turpentine, doth draw, cleanſe, and heal, any bile, plague-ſore, or foul ulcer. The bran of wheat-meal ſteeped in ſharp vinegar, and then bound in a linen cloth, and rubbed on thoſe places that have the ſcurf, morphew, ſcabs, or leproſy, will take them away, the body being firſt well purged and prepared. The decoction of the bran of wheat or barley is of good uſe to bathe thoſe places that are burſten by a rupture, and the ſaid bran boiled in good vinegar, and applied to ſwollen breaſts, helpeth them, and ſtayeth all inflammations. It helpeth alſo the bitings of vipers and all other venomous creatures. The leaves of wheat-meal, applied with ſalt, take away hardneſs of the ſkin, warts, and hard knots in the fleſh. Wafers put in water and drunk, ſtay the laſk and bloody flux, and are profitably uſed both inwardly and outwardly for ruptures in children. Boiled in water unto a thick jelly, it ſtayeth ſpitting of blood; and boiled, with mint and butter, it helpeth hoarſeneſs.

## WILLOW TREE.

Government and Virtues. THE Moon owns it. The leaves, bark, and ſeed, are uſed to ſtaunch bleeding at noſe and mouth, ſpitting of blood, and all other fluxes of blood in man or woman, and to ſtay vomiting, and provocation thereunto, if the decoction of them in wine be drunk. It helpeth alſo to ſtay thin, hot, ſharp, ſalt, diſtillations from the head upon the lungs, cauſing a conſumption. The leaves bruiſed with ſome pepper and drunk in wine, much help the wind cholic. The leaves bruiſed, and boiled in wine and drunk, ſtay the heat of luſt. The water that is gathered from the willow when it flowereth, the bark being ſlit, is very good for redneſs and dimneſs of ſight, for films that grow over the eyes, and ſtay the rheums that fall into them; to provoke urine, being ſtopped, if it be drunk; and to clear the face and ſkin from ſpots and diſcolourings. Galen ſaith, the flowers have an admirable faculty in drying up humours, being a medicine without any ſharpneſs or corroſion. The bark works the ſame effects, if uſed in the ſame manner; and the tree hath always bark upon it, though not always flowers. The burnt aſhes of the bark, being mixed with vinegar, take away warts, corns, and ſuperfluous fleſh. The decoction of the leaves or bark in wine, takes away ſcurf, or dandriff, by waſhing the place with it. It is a fine cool tree, the boughs of which are very convenient to be placed in the chamber of one ſick of a fever.

## WOAD.

Description. It hath divers large leaves, long, and ſomewhat broad, like thoſe of the greater plantane, but larger, thicker, of a greeniſh colour, and ſomewhat blue; from among which leaves riſeth up a luſty ſtalk, three or four feet high, with divers leaves ſet thereon; the higher the ſtalk riſeth, the ſmaller are the leaves: at the top it ſpreadeth into divers branches, at the end of which appear very pretty little yellow flowers, which, after they paſs away, come huſks, long, and ſomewhat flat; in form they reſemble a tongue; in colour, they are black, and hang downwards. The ſeed contained within theſe huſks, if it be a little chewed, gives an azure colour. The root is white and long.

Place. It is ſowed in fields for the benefit of it, where thoſe that ſow it cut it three times a year.

Time. It flowereth in June, but it is long after before the ſeed is ripe.

Government and Virtues. It is a cold and dry plant of Saturn. Some people affirm the plant to be deſtructive to bees. They ſay it poſſeſſeth bees with the flux; but that I can hardly believe, unleſs bees be contrary to all other creatures; I ſhould rather think it poſſeſſeth them with the contrary diſeaſe, the herb being exceedingly drying and binding. However, if any bees be diſeaſed thereby, the cure is to ſet urine by them, but ſet it in ſuch a veſſel that they cannot drown themſelves, which may be remedied if you put pieces of cork in it. I told you the herb is ſo drying and binding, that it is not fit to be given inwardly. An ointment made thereof ſtauncheth bleeding. A plaiſter made thereof, and applied to the region of the ſpleen, takes away the hardneſs and pains thereof. The ointment is excellent good in ſuch ulcers as abound with moiſture, and takes away corroding and fretting humours. It cools inflammations, quencheth St. Anthony's fire, and ſtayeth defluxions of blood to any part of the body.

## WOODBINE, or HONEY-SUCKLES.

Time. THEY flower in June, and the fruit is ripe in Auguſt.

Government and Virtues. It is an herb of Mercury, and appropriated to the lungs; the celeſtial Crab claims dominion over it, neither is it a foe to the Lion. It is fitting a conſerve, made of the flowers of it, were kept in every houſe; I know no better cure for an aſthma; beſides, it takes away the evil of the ſpleen, provokes urine, procures ſpeedy delivery to women; helps cramps, convulſions, and palſeys, and whatſoever griefs come of cold or ſtopping. Made into an ointment, it will clear the ſkin of morphew, freckles, and ſun-burning, or whatſoever elſe diſcolours it.

## WORMWOOD.

Kinds. THREE wormwoods are familiar with us. Sea-wormwood hath as many names as virtues, *Seriphian*, *Santonicon*, *Belgicum*, *Narboneſe*, *Xantomicum*, *Miſnenſe*, and many more. The ſeed of this wormwood is that which uſually women give their children for the worms: of all wormwoods that grow here, this is the weakeſt. The ſeeds of the common wormwood are far more prevalent than the ſeed of this to expel worms in children, or people of ripe age. Of both ſome are weak, ſome are ſtrong. The Seriphian wormſeed is the weakeſt, and haply may prove to be fitteſt for weak bodies. Let ſuch as are ſtrong take the common wormſeed, for the other will do but little good. Its due praiſe is this; it is weakeſt, therefore fitter for weak bodies. The leaves have commonly been uſed, but the flowery tops are the right part. Theſe, made into a light infuſion, ſtrengthen digeſtion, correct acidities, and ſupply the place of gall, where, as in many conſtitutions, that is deficient.

Place. It grows familiarly in England by the ſea-ſide.

Description. It ſtarts up out of the earth with many round woody hoary ſtalks from one root; its height is four feet, or three at the leaſt. The leaves are long, narrow, white, hoary, like ſouthernwood, only broader and longer, in taſte rather ſalt than bitter, becauſe it grows ſo near the ſalt water: at the joints with the leaves, toward the tops, it bears little yellow flowers. The root lies deep, and is woody.

Common wormwood I need not deſcribe.

Description of Roman Wormwood. The ſtalks are ſlender and ſhorter than the common wormwood by one foot at leaſt; the leaves are more finely cut and divided than they are, but ſomething ſmaller; both leaves and ſtalks are hoary; the flowers of a pale yellow colour; it is altogether like the common wormwood, ſave only that it is ſmaller, not ſo bitter, and of a ſweeter ſmell.

Place. It groweth upon the tops of the mountains; but is uſually nurſed up in gardens for the uſe of the apothecaries in London.

Time. All wormwoods uſually flower in Auguſt, a little ſooner or later.

Government and Virtues. Wormwood is an herb of Mars. It is hot and dry in the firſt degree, viz. juſt as hot as your blood, and no hotter. It remedies the evils choler can inflict on the body of man by ſympathy; it helps the evils Venus produces by antipathy; and it cleanſeth the body of choler. It provokes urine, helps ſurfeits, ſwellings in the belly; it cauſeth an appetite to meat, becauſe Mars rules the attractive faculty in man: the Sun never ſhone upon a better herb for the yellow jaundice than this. Take the flowers of wormwood, roſemary, and blackthorn, of each a like quantity, half that quantity of ſaffron, boil this in Rheniſh-wine, but put not in the ſaffron till it is almoſt boiled: this is the way to keep a man's body in health, appointed by Camerarius, in his book, intitled *Hortus Medicus*. Beſides all this, wormwood provokes the terms. Wormwood, being an herb of Mars, is a preſent remedy for the biting of rats and mice. Muſhrooms are under the dominion of Saturn; if any have poiſoned himſelf by eating them, wormwood, an herb of Mars, cures him, becauſe Mars is exalted in Capricorn the houſe of Saturn; and this it doth by ſympathy. Wheals, puſhes, black and blue ſpots, coming either by bruiſes or beatings, wormwood, the herb of Mars, helps. Mars eradicates all diſeaſes in the throat by his herbs, (of which wormwood is one,) and this by antipathy. The eyes are under the luminaries: the right eye of a man, and the left eye of a woman, the Sun claims dominion over; the left eye of a man, and the right of a woman, are the privilege of the Moon: wormwood, an herb of Mars, cures both. Suppoſe a man be bitten or ſtung by a martial creature, imagine a waſp, a hornet, or ſcorpion; wormwood, an herb of Mars, gives you a preſent cure. Mix a little wormwood with your ink, and neither rats nor mice will touch the paper that is written with it. Wormwood is a preſent cure for the cholic. Moths are under the dominion of Mars; his herb, wormwood, being laid amongſt clothes, will hinder moths from hurting them. Wormwood is good for an ague. A draught of wormwood beer, taken every morning, is a certain remedy for a ſtinking breath. It likewiſe cures dimneſs of ſight by antipathy.

## WOLF-BANE.

Description. It hath a root ſhining within like alabaſter. There are many kinds, all extremely pernicious and poiſonous; for, if a man or beaſt be wounded with arrow, knife, ſword, or any other inſtrument, dipped in the juice of this herb, they die incurable within half an hour. The reaſon this herb goes by the name of wolf-bane was this: men in former ages hunting for wolves uſed to poiſon pieces of raw fleſh with the juice of this herb and lay them as baits, on which the wolves died preſently.

## YARROW.

Names. CALLED alſo noſe-bleed, mil-foil, and thouſand-leaf.

Description. It hath many long leaves ſpread upon the ground, and finely cut and divided into many ſmall parts. Its flowers are white, upon divers green ſtalks which riſe from among the leaves.

Place. It is frequent in all paſtures.

Time. It flowereth not until the latter end of Auguſt.

Government and Virtues. It is under the influence of Venus. An ointment of it cures wounds, and is moſt fit for ſuch as have inflammations. It ſtops the bloody flux; the ointment of it is not only good for green wounds, but alſo for ulcers and fiſtulas, eſpecially ſuch as abound with moiſture. It ſtayeth the ſhedding of hair, the head being bathed with the decoction of it. Inwardly taken, it helps the retentive faculty of the ſtomach, and ſuch as cannot hold their water. The leaves, chewed, eaſe the tooth-ach; and theſe virtues put together ſhew the herb to be drying and binding. There is an ancient charm for curing tertian agues with yarrow. A leaf of it is to be pulled off with the left hand, pronouncing at the ſame time the ſick man's name; and this leaf is to be taken. The ſame thing has been ſaid of feverfew; for, in old times, names of plants, as well as now, were too much confounded. The feverfew ſeems beſt for the purpoſe.

## YUCCA, OR JUCCA.

Description. THIS Indian plant hath a thick tuberous root, ſpreading in time into many tuberous heads, whence ſhoot forth many long, hard, and hollow, leaves, very ſharp pointed, compaſſing one another at the bottom, of a greyiſh green colour, abiding continually, or ſeldom falling away, with ſundry hard threads running in them, and, being withered, become pliant to bind things. From the midſt thereof ſpringeth forth a ſtrong round ſtalk, divided into ſundry branches, whereon ſtand divers ſomewhat-large white flowers, hanging downwards, conſiſting of ſix leaves with divers veins, of a weak reddiſh or blueiſh colour, ſpread on the back of three outer leaves, from the middle to the bottom, not reaching to the edge of any leaf; which abide not long, but quickly fall away.

Place and Time. It groweth in divers places of the Weſt-Indies, as in Virginia and New England, and flowers about the latter end of July.

Virtues. There hath no property hereof conducible to phyſical uſes as yet been heard of, but ſome of its vices. The natives in Virginia uſe, for bread, the roots hereof. The raw juice is dangerous, if not deadly. It is very probable that the Indians uſed to poiſon the heads of their darts with this juice, which they uſually keep by them for that purpoſe.

# OF GATHERING, DRYING, AND PRESERVING, PLANTS, HERBS, AND FLOWERS.

## THE LEAVES OF HERBS OR TREES.

CHUSE only ſuch as are green and full of juice, pick them carefully, and caſt away ſuch as are declining, for they will putrify the reſt.

Note in what place they moſt delight to grow, and gather them there; for betony that grows in the ſhadow is far better than that which grows in the ſun, becauſe it delights in the ſhadow: ſo alſo ſuch herbs as delight to grow near the water ſhould be gathered near the water, though you may find ſome of them on dry ground.

The leaves of ſuch herbs as run up to ſeed are not ſo good when they are in flower as before, (ſome few excepted, the leaves of which are ſeldom or never uſed:) in ſuch caſes, if through ignorance they were not known, or through negligence forgotten, you had better take the top and the flower than the leaf.

Dry them well in the ſun, and not in the ſhadow, for, if the ſun draw away the virtues of herbs, it muſt needs do the like by hay; which the experience of every country farmer will explode as a vulgar error.

Let the planet that governs the herb be angular, and the ſtronger the better. In herbs of Saturn, let Saturn be in the aſcendant; in herbs of Mars, let Mars be in the mid-heaven, for in thoſe houſes they delight: let the Moon apply to them by good aſpect, and let her not be in the houſes of their enemies; if you cannot well ſtay till ſhe apply to them, let her be with a fixed ſtar of their nature*.

Having well dried them, put them up in brown-paper bags, and preſs them not too hard together, and keep them in a dry place near the fire. As for the duration of dried herbs, a juſt time cannot be given, for, firſt, ſuch as grow upon dry grounds will keep better than ſuch as grow on moiſt; ſecondly, ſuch herbs as are full of juice will not keep ſo long as ſuch as are drier; thirdly, ſuch herbs as are well dried will keep longer than ſuch as are ill dried. Yet by this you may know when they are corrupted, viz. by their loſs of colour, or ſmell, or both; and, if they be corrupted, reaſon will tell you that they muſt needs corrupt the bodies of thoſe people that take them. Remember to gather all the leaves in the hour of that planet that governs them.

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* For this moſt wonderful operation of the planetary ſyſtem on plants, herbs, &c. and indeed upon all things ſublunary, ſee my Illuſtration of the Occult Sciences, or, Doctrine of the Stars.

## OF FLOWERS.

THE flower, which is the beauty of the plant, and of none of the leaſt uſe in phyſic, groweth yearly, and it is to be gathered when it is in its prime.

As for the time of gathering them, let the planetary hour, and the plant they come of, be obſerved, as above directed; as for the time of day, let it be when the ſun ſhines upon them, that they may be dry; for, if you gather either flowers or herbs when they are wet or dewy, they will not keep. Dry them well in the ſun, and keep them in papers near the fire. So long as they retain their colour and ſmell they are good; either of them being gone, ſo is their virtue alſo.

## OF SEEDS.

THE ſeed is that part of the plant which is endued with faculty to bring forth its like, and it contains potentially the whole plant itſelf.

As for place, let them be gathered from the places where they delight to grow. Let them be fully ripe when they are gathered, and forget not the celeſtial harmony before-mentioned, for I have found by experience that their virtues are twice as great at ſuch times as others: there is an appointed time for every thing under the ſun. When you have gathered them, dry them a little in the ſun before you lay them up. You need not be ſo careful of keeping them ſo near the fire as the other before-mentioned, becauſe they are fuller of ſpirit, and therefore not ſubject to corrupt. As for the time of their duration, it is palpable they will keep a great many years; yet, they are beſt the firſt year, and this I make appear by a good argument, they will grow ſooneſt the firſt year they be ſet, therefore then are they in their prime, and it is an eaſy matter to renew them yearly.

## OF ROOTS.

OF roots, chuſe ſuch as are neither rotten nor worm-eaten, but proper in their taſte, colour, and ſmell; ſuch as exceed neither in ſoftneſs nor hardneſs.

Give me leave here to deny the vulgar opinion, that the ſap falls down into the root in the autumn, and riſes again in the ſpring, as men go to bed at night, and riſe again in the morning; which idle tale of untruth is ſo grounded in the heads not only of the vulgar, but alſo of the learned, that men cannot drive it out by reaſon: If the ſap fall into the root in the fall of the leaf, and lie there all the winter, then muſt the root grow only in the winter, as experience witneſſeth: but the root grows not at all in winter, as the ſame experience teacheth, but only in the ſummer; for example: If you ſet an apple-kernel in the ſpring, it will grow to a pretty bigneſs in that ſummer, and be no bigger next ſpring: the truth is, when the Sun declines from the tropic of Cancer, the ſap begins to congeal both in root and branch; when he toucheth the tropic of Capricorn, and aſcends to us-ward, it begins to get thin again by degrees, as it congealed.

The drier time you gather your roots in, the better they are: for they have the leſs excrementitious moiſture in them. Such roots as are ſoft ſhould be dried in the ſun, or elſe hang them in the chimney corner upon a ſtring: as for ſuch as are hard, you may dry them any where. Such roots as are large will keep longer than ſuch as are ſmall: yet moſt of them will keep a year. Such roots as are ſoft ſhould be always kept near the fire; and take this general rule for it, if in winter you find any of your roots, herbs, or flowers, begin to grow moiſt, as many times they will, (for it is beſt to look to them once a month,) dry them by a very gentle fire; or, if you can with convenience keep them near the fire, you may ſave this trouble.

## OF BARKS.

BARKS which phyſicians uſe in medicines are of three ſorts: of fruits, of roots, of boughs.

The barks of fruits are to be taken when the fruits are full ripe, as oranges, lemons, &c. The barks of trees are beſt gathered in the ſpring, if it be of great trees, as oaks, or the like; becauſe then they come eaſieſt off, and ſo you may dry them if you pleaſe: but your beſt way is to gather all barks only for preſent uſe.

As for the bark of roots, it is thus to be gotten: take the roots of ſuch herbs as have pith in them, as parſley, fennel, &c. ſlit them in the middle, and when you have taken out the pith (which you may eaſily and quickly do) that which remains is called the bark, and is only to be uſed.

## OF JUICES.

JUICES are to be preſſed out of herbs when they are young and tender, and alſo of ſome ſtalks and tender tops of herbs and plants, and alſo of ſome flowers.

Having gathered the herb you would preſerve the juice of, when it is very dry, bruiſe it well in a ſtone mortar with a wooden peſtle; then, having put it into a canvas bag, preſs it hard in a preſs, then take the juice and clarify it.

When you have clarified it, and it is cold, put it into a glaſs, and put ſo much oil on it as will cover it the thickneſs of two fingers; the oil will ſwim at top, and ſo keep the air from coming to putrify it; or, inſtead of oil, when you have clarified the juice as before, boil it over the fire till (when cold) it be the thickneſs of honey: then tie it down cloſe, and keep it for uſe.

Whatever you gather of plants, herbs, fruits, flowers, roots, barks, ſeeds, &c. for medicinal purpoſes, either for diſtillation, ſyrups, juleps, decoctions, oils, electuaries, conſerves, preſerves, ointments, and the like, muſt be gathered when they are in the greateſt vigour and fulleſt perfection; for in that ſtate only are they fit to be applied for the reſtoration and preſervation of our health; and, when they are applied, let it be done under the ſympathetic influence of planets participating in the ſame nature; the benefits of which are ſo amply demonſtrated in my Diſplay of the Occult Sciences.

END OF THE HERBAL.

# INDEX TO THE HERBS AND PLANTS.

Page.
Aconitum - 70
Adder's Tongue - 52
Agrimony - - 53
Agrimony, Water - 54
Alder, Black - - 57
Alder, Common - - 58
Alehoof - - - 55
Alexander - - 56
Alheal - - - 50
Alkanet - - 51
Almond-Tree - - 70
Aloes - - 71
Amara Dulcis - - 49
Amaranthus - - 61
Anemone - - 62
Angelica - - 59
Archangel - - 64
Arrach, Garden - 63
Arrach, Wild - - 63
Arſeſmart - - - 65
Artichokes - - 198
Aſh-Tree - - 68
Aſparagus - - 67
Aſparagus, Prickly - 68
Aſſarabacca - - 66
Avens - - 69
Balſam-Tree - 104
Barberry - - 73
Barley - - - - 73
Baſil - - - 74
Bawm - - 72
Bay-Tree - - 75
Beans - - - 76
Beans, French - 77
Bed-Straw - - 78
Beech-Tree - - 82
Beets - - - 79
Betony, Water - - 80
Betony, Wood - - 81
Bilberries - - 83
Birch-Tree - - 84
Bird's Foot - - 85
Biſhop's Weed - - 86
Biſtort - - - 86
Blackbind Weed - 103
Blights - - 89
Blue-bottle - - 91
Borage and Bugloſs - 90
Bramble - - 88
Brank Urſine - - 92
Briony - - - 92
Brooklime - - 94
Broom and Broomrape - 96
Buckſhorn - - 98
Buckſhorn Plantain - 97
Buck Wheat - - 102
Bugle - - - - 98
Burdock - - 101
Burnet - - - 99
Butcher's Broom - - 95
Butter Bur - - 101
Byfoil - - - 84
Cabbages and Coleworts - 105
Callamint - - 107
Caltrops, Water - - 109
Camomile - - 108
Campions, Wild - 109
Carduus Benedictus - 110
Carob-Tree - 150
Carraway - - 115
Carrots - - - 112
Caſſia Fiſtula - - 150
Cedar-Tree - - 144
Celandine - - - 115
Celandine, Leſſer - 117
Centaury, Ordinary - 118
Cherries, Winter - - 120
Cherry-Tree - - 119
Chervil - - 121
Chervil, Sweet - - 122
Cheſnut, Earth - - 123
Cheſnut-Tree - - 122
Chick Peaſe - - 124
Chickweed - - 123
Cinquefoil - - - 124
Ciſtus - - - 146
Cives - - 125
Clary - - - 125
Clary, Wild - - 126
Cleavers - - 127
Clown's Wound-wort - 128
Cockel - - - 147
Cock's Head - - 129
Cocoanut-Tree - - 142
Coffee - - 143
Colewort, Sea - - 106
Coloquintida - - 148
Coltsfoot - - 131
Columbines - - 129
Comfrey - - 131
Coral - - - 151
Coral Wort - - 131
Coriander - - 148
Cornel-Tree - - 149
Coſtmary - - 132
Cowſlips - - 133
Crabs' Claws - - 134
Creſſes, Black - - 134
Creſſes, Sciatica - 135
Creſſes, Water - - 136
Croſs Wort - - - 137
Crowfoot - - 137
Cubebs - - - 140
Cuckow Pint - - 138
Cucumbers - - 140
Cudweed - - - 132
Currants - - 141
Cypreſs - - 143
Daffodil, White - 160
Daffodil, Yellow - - 161
Daiſies - - 151
Dandelion - - 152
Darnel - - - 153
Date-Tree - - 162
Devil's Bit - - 154
Dictamnum of Candy - 163
Dictamnum, Falſe - - 164
Dill - - - 153
Dock - - - 155
Dodder - - 155
Dog Graſs - - 156
Double Tongue - - 159
Dove's Foot - - 157
Down, or Cotton Thiſtle 158
Dragons - - 158
Duck's Meat - - 158
Dunch Down - - 159
Dwarf Plane-Tree - 159
Eglantine - - 170
Elder-Tree - - 168
Elder, Dwarf - 169
Elecampane - - 166
Elm-Tree - - 165
Endive - - 165
Eringo - - 167
Eryſimum - - 170
Euphorbium - - 171
Eyebright - - 168
Fennell - - 174
Fennell, Sow - - 175
Fenugreek - - 184
Fern - - - 172
Fern, Water - - 172
Feverfew - - 173
Fig-Tree - - 177
Figwort - - 175
Filipendula - - 176
Fir-Tree - - 186
Fiſtick-Nuts - - 185
Flax - - - 185
Flax Weed - - 179
Fleabane - - 180
Fleawort - - 179
Flower-de-luce - - 177
Fluellin - - 181
Flux Weed - - 180
Fox Gloves - - 182
Fumitory - - 182
Furze-Buſh - - 183
Galangal - - 194
Galloak - - 197
Garlick - - 187
Gentian - - 187
Germander - - 189
Gilly Flowers, Clove - 189
Gilly Flowers, Stock - 195
Gilly Flowers, Yellow - 196
Gladwin, Stinking - - 189
Golden Rod - - 190
Gooſeberry-Buſh - 193
Gout Herb - - 191
Green, Winter - 193
Gromel - - 192
Groundſel - - 194
Hart's Tongue - 198
Hawkweed - - 199
Hawthorn - - 200
Hazel-Nut - - 199
Heart's Eaſe - - 198
Hellebore, Black - 203
Hemlock - - 200
Hemp - - - 201
Henbane - - 202
Herb Robert - - 204
Herb Truelove - 204
Horehound - - 207
Holly - - - 209
Honeywort - - 215
Hops - - - 206
Horſetail - - 208
Hound's Tongue - 210
Houſeleek - - 209
Hyſop - - - 203
Hyſop, Hedge - 202

Ivy

Page.
Ivy 212
Indian Leaf 215
John's Wort, St. 211
Jujube-Tree 213
Juniper 212
Kali 218
Kidney Wort 216
Knapweed 217
Knot Graſs 218
Ladies' Mantle 219
Ladies' Smock 221
Larch-Tree 228
Lavender 220
Lavender Cotton 221
Lemon-Tree 230
Lentils 229
Lettuce 222
Lilly of the Valley 223
Lilly, Water 222
Lilly, White 223
Linden-Tree 231
Liquorice 224
Liver Wort 224
Looſeſtrife 225
Looſeſtrife with ſpiked Heads 226
Lovage 227
Love Apple 227
Lung Flower 232
Lungwort 228
Lupines 235
Madder 236
Madwort 263
Maiden Hair 237
Maiden Hair, Golden 238
Maiden Hair, White 237
Mallows 238
Mandrake 263
Maple-Tree 240
Marigolds 242
Marjoram, Sweet 241
Marjoram, Wild 240
Maſterwort 242
Maſtic-Tree 260
Maudlin, Sweet 243
Mayweed 262
Mealy-tree 261
Medlar 244
Melilot 245
Mercury, Dog 246
Mercury, French 245
Mint 247
Miſſeltoe 249
Moneywort 255
Moonwort 251
Moſſes 252
Motherwort 253
Mouſe-ear 254
Mugwort 255
Mulberry-Tree 257
Mullien 257
Muſtard 258
Muſtard, Hedge 260
Muſhroom 264
Nailwort 265
Navelwort 269
Nep 266
Nettle 266
Nightſhade 268
Nightſhade, Deadly 269

Page.
Nightſhade, Woody 269
Nipplewort 270
Nutmeg-Tree 271
Oak 272
Oats 272
Olive-Tree 276
One-Blade 88 and 273
Onions 274
Orange-Tree 278
Orchis 274
Orpine 275
Parſley 280
Parſley, Pert 281
Parſnip 281
Parnſnip, Cow 282
Peach-Tree 283
Pear-Tree 284
Pellitory of Spain 285
Pellitory of the Wall 286
Penny Royal 287
Pepper 303
Pepper, Guinea 305
Pepper Wort 289
Perwinkle 290
Peter's Wort, St. 291
Pimpernel 291
Pine, Ground 292
Piony, Maſculine and Feminine 288
Pitch-Tree 308
Plantain 293
Plumbs 294
Polipody 295
Pomecitron-Tree 301
Pomegranate-Tree 310
Poplar-Tree 296
Poppy 297
Primroſes 301
Privet 301
Purſlain 300
Queen of the Meadows 311
Quick Graſs 313
Quince-Tree 312
Radiſh 314
Ragwort 315
Rattle Graſs 316
Reed, Aromatical 331
Reſt-harrow 317
Rhubarb 324
Rhubarb, Baſtard 325
Rhubarb, Monk's 325
Rice 330
Rocket 318
Rocket, Winter 319
Roſa Solis 322
Roſemary 323
Roſes 319
Rue, Garden 328
Rue, Meadow 327
Rupture Wort 329
Ruſhes 329
Rye 330
Saffron 333
Sage 334
Sage, Wood 335
Samphire 337
Sanicle 337
Saracen's Confound 338
Sarſaparilla 354
Sauce-alone 339

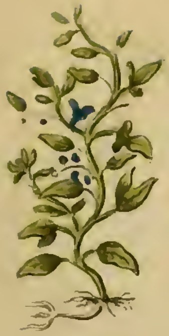
Page.
Saunders 357
Savine 340
Savory, Winter and Summer 340
Saxifrage, Burnet 341
Saxifrage, White 340
Scabious 342
Scammony 357
Scurvy Graſs 343
Sebeſten 359
Sebeſten, Wild 360
Self-heal 345
Sena 361
Service-Tree 345
Shepherd's Purſe 346
Smallage 346
Solomon's Seal 336
Sopewort 347
Sorrel 347
Sorrel, Wood 348
Southernwood 350
Sow-thiſtle 349
Spignel 350
Spikenard 362
Spleen-wort 361
Star-thiſtle 352
Stonecrop 354
Storax-Tree 363
Strawberries 352
Succory 353
Swallow Wort 364
Sycamore-Tree 361
Tamariſk-Tree 367
Tanſy, Garden 367
Tanſy, Wild 368
Thiſtle 369
Thiſtle, Fuller's 371
Thiſtle, Melancholy 369
Thiſtle, Our Lady's 370
Thiſtle, Woolly or Cotton 370
Thorn, Black 372
Thorough-wax 373
Thyme 373
Thyme, Wild 374
Tobacco, Engliſh and Indian 366
Tormentil 374
Treacle Muſtard 372
Trefoil, Heart 377
Trefoil, Meadow 376
Trefoil, Pearl 377
Turnſole 376
Tutſan, or Park-leaves 377
Valerian, Garden 378
Vervain 379
Vine 380
Violets 381
Viper's Bugloſs 381
Wall Flowers, or Winter Gilly Flowers 382
Walnut-Tree 383
Wheat 385
Willow-Tree 386
Woad 386
Wold, or Dyer's Weed 384
Wolf-bane 389
Wood-bind, or Honeyſuckles 387
Wormwood 387
Yarrow 389
Yucca, or Jucca 390.

# INDEX OF DISEASES CURED BY THE FOREGOING PLANTS AND HERBS.

ABORTION, 93, 334, 368.
Aconites, or Reſiſters of Poiſon, 75, 257, 293.
Aches, 258, 293, 316, 367.
Adders, 128, 377.
Aduſt Choler, 111, 156.
After-birth, 75, 93, 122, 127, 173, 207, 223, 255, 293.
Agues, 54, 55, 67, 82, 84, 97, 119, 156, 166, 188, 199, 212, 222, 227, 238, 247, 259, 299, 326, 328, 339, 350, 354, 370, 380, 384.
Agues in the Breaſt, 161, 227.
Almonds in the Ears, 109, 267.
Andicomes, 76, 266.
Anthony's Fire, St. 34, 83, 1[illegible]1, 134, 158, 209, 217, 2[illegible], 319.
Apoplexy, 220, 224, 245, 250
Arm-pits, ill Scent, 369.
Arteries, [illegible]
Aſthma, [illegible].
Back, eaſing Pains, and ſtrengthening of the, 52, 132, 260, 383.
Baldneſs, 80, 165, 384.
Barrenneſs, 63, 113 220, 265
Beauty, 116, 134, 165, 220
Beaſts, Venemous, 69, 82, 86, 188.
Belching, 100.
Belly-ach, 227, 239, 254, 260.
Belly, Binders of the, 319
Belly, Openers of the, 68, 293, 312.
Bees, 209, 239, 340.
Biting of mad Dogs, 73, 81, 177, 188, 208, 210, 294.
Birth, 50, 51.
Biting of Serpents, 69, 73, 199.
Bindings, 57, 85, 208, 272, 294.
Bleedings, 78, 81, 98, 99, 109, 123, 128, 133, 208, 209, 218, 225, 237, 244, 252, 257, 266, 293, 311, 333, 336, 337, 340, 354, 377.
Bleeding by Leaches, to ſtay, 76.
Blood, to cool the, 73, 89, 90, 201.
Blood, Spitting of, 293.
Bloody Stools, 94.
Bloody Urine, 53.
Blaſtings by Lightning, 300.
Black and Blue Spots, 86, 115, 125, 257.
Bladder, 68, 101, 134, 173, 176, 193, 199, 224, 239, 381.
Blemiſhes, 177.
Blindneſs, 226, 326.
Blows, 238, 241.
Breaſt, 52, 55, 132, 152, 177, 187, 247, 292.
Brain, 69, 107, 125, 134, 169, 189, 220, 223, 285.
Breathing, Difficulty of, 49, 72, 75, 77, 92, 166, 328.
Bloody-Flux, 53, 54, 72, 88, 97.
Bliſters, 79, 311, 348.
Bowels, 115, 125, 222, 238, 275, 319.
Bots, 187.
Boils, 73, 81, 125, 257, 329.
Bones broken, 92, 96, 98, 101, 154, 180, 209, 339.
Bruiſes, 52, 55, 69, 81, 89, 98, 115, 211, 219, 237, 238, 325, 336, 345, 373.
Burning, 50, 64, 79, 92, 131, 169, 199, 210, 212, 223, 289.
Cachexia, 54, 58, 132, 152.
Cancers, 54, 92, 115, 124, 126, 178.
Cankers, 80, 86, 98, 101, 109, 209, 181, 217, 280, 316, 340.
Cantharides, 86, 272.
Carbuncles, 340, 343, 383.
Caſtings, 58, 345.
Cattle, poiſoned, 204.
[illegible], 238, 352.
Child-birth, 81, 175.
Chilblains, 202, 217.
Chin-cough, 319, 373.
Choler, 73, 109, 132, 169, 172, 174, 177, 189, 202, 211, 222, 240, 247, 295, 312, 319, 325, 354, 376, 377.
Choleric Puſhes, 131.
Choleric Fluxes, 300.
Choleric Humours, 291, 353
Cholic, 50, 53, 59, 69, 86, 107, 115, 118, 169, 173, 177, 194, 199, 212, 220, 257, 260, 294, 322, 327, 339, 341, 367, 383.
Chaps, 187, 247, 333, 384.
Cods, 76, 202, 217, 238, 380, 384.
Cold, 81, 107, 242, 254, 292.
Cough, 53, 75, 81, 92, 108, 119, 131, 210, 212, 260, 266, 282, 292, 295, 300, 323, 327, 334, 374, 378, 379.
Conception, 112, 219, 334.
Congealed Blood, 49, 65, 126, 131, 176.
Conſumption, 90, 101, 105, 189, 207, 212, 240, 285, 293, 387.
Convulſions, 68, 81, 107, 118, 134, 166, 187, 189, 198, 200, 212, 220, 238, 329, 341, 350, 371, 387.
Coſtiveneſs, 124.
Corroſion, 179.
Corruption, 132.
Counter-poiſon, 212, 238.
Cramp, 50, 68, 92, 107, 118, 134, 166, 177, 187, 189, 201, 212, 220, 238, 251, 255, 287, 292, 334, 341, 350, 366, 374, 387.
Dandriff, 80, 260, 342.
Dead Child, 50, 92, 228, 244, 294.
Deafneſs, 59, 155, 240, 340, 348, 383.
Deformity, 173, 176, 291, 351.
Defluxions, 297, 315, 387.
Diabetes, 152, 374.
Digeſtion, 319, 337, 339.
Difficulty of Breathing, 101, 138, 266.
Dimneſs of Sight, 59, 212, 245, 287, 296, 371, 380.
Diſeaſe, ſudden, 49.
Diſlocations, 63, 96.
Dogs, 81, 187, 206.
Dreams, 222, 247, 300.
Dropſy, 57, 67, 69, 81, 96, 167, 169, 177, 187, 199, 200, 204, 210, 219, 243, 255, 281, 293, 327, 338, 347, 367, 370, 374.
Drowſineſs, 323.
Drunkenneſs, 212.
Dullneſs of Spirit, 189, 334.
Diſury, 75, 76, 86, 92, 95, 101, 121, 131, 134, 152, 155, 167, 169, 175, 183, 189, 199, 206, 211, 216, 227, 237, 258, 275, 281, 315, 367.
Ears, 53, 65, 73, 82, 118, 128, 170, 175, 177, 218, 240, 247, 272, 284, 287, 294, 319, 325, 340, 371, 383.
Earwig, 201.
Epidemical Diſeaſes, 59, 81, 91, 99, 273, 274.
Ephialtes, or Night-mare, 98, 133, 288.
Excoriations, 166, 208, 238.
Eyes, 57, 62, 67, 73, 76, 81, 88, 97, 118, 125, 139, 158, 165, 168, 177, 182, 200, 207, 210, 212, 226, 246, 283, 285, 320, 349, 376, 382.
Face, 69, 371, 386.
Fainting, 155, 187.
Falls, 49, 51, 98, 122, 125, 154, 217, 239, 336.
Falling Sickneſs, 49, 51, 125, 133, 182, 211, 212, 239, 249, 258, 280, 282, 285, 287, 288, 293, 296, 334, 381.
Fat decreaſeth, 175.
Felons, 65, 75, 265.
Fevers, 73, 88, 91, 154, 179.
Films in the Eyes, 126, 169, 174, 272, 352.
Fiſtulas, 66, 99, 178, 193, 218, 266, 272, 282, 287, 316, 340, 371, 380.
Forgetfulneſs, 323.
Fleas, 58, 65.
Flies, to keep from Sores, 66.
Flagging Breaſts, 219.
Flux of Blood, 79, 84, 98, 99, 125, 155, 177, 179, 182, 209, 212, 217, 219, 238, 245, 252, 255, 272, 294, 301, 312, 313, 317, 320, 335, 336, 386.
Freckles, 92, 137, 139, 140, 158, 167, 176, 178, 200, 227, 258, 272, 286, 369.
French Pox, 168, 198, 202, 206, 320, 335, 367.
Frenzy, 175, 209, 283, 293, 300, 374, 380.
Fundament, 176, 320.
Gall, 108, 152, 156, 157, 158.
Galled Feet, 59.
Gangrenes, 99, 131, 153, 218, 266, 367, 383.
Gout, 57, 64, 68, 73, 76, 81, 92, 105, 119, 124, 129, 138, 158, 165, 167, 189, 202, 212, 223, 243, 258, 260, 266, 268, 286, 287, 290, 293, 296, 301, 328, 373, 376, 377, 382.
Gnats, 225.
Green Sickneſs, 222.
Gravel, 52, 68, 89, 92, 95, 109, 110, 120, 131, 158, 177, 183, 190, 193, 218, 243, 247, 266, 281, 286, 292, 315, 319, 337, 340, 347, 380.
Griping, 157, 238.
Groin, 268.
Gums, 89, 109, 199, 287, 319, 369.
Hair, to make yellow, 73.
—— to reſtore, 223, 258, 286, 312.
Head, 66, 88, 115, 119, 134, 182, 189, 240, 245, 247, 319, 328.
Head-ach, 79, 96, 132, 158, 165, 174, 175, 212, 220, 222, 250, 253, 282, 288, 314, 323, 345, 353, 379, 380, 381, 383.
Hearing, 57. See alſo Ears.
Heat, 152, 209, 218, 300, 319.
Heart, 99, 127, 189, 223, 242, 322, 337, 353, 377, 381.
Hemorrhoids, 118, 123, 131, 175, 179, 209, 212, 257, 349.
Hiccough, 154, 174, 199, 247
High Colour, 86.
Hips, 373.
Hoarſeneſs, 177, 179, 224, 260, 297, 334.
Humours, 95, 120, 205, 210, 246, 320, 322, 385.
Hypochondria, 152, 156.
Jaundice, Black, 50, 52, 62.
———— Yellow, 52, 66, 72, 96, 107, 108, 156, 182, 198, 212, 228, 280, 283, 287, 320, 325, 348, 366.
Jaws, 55.
Iliac Paſſion, 340.
Impoſthumes, 50, [illegible], 25[illegible], 265, 316, 323, 334, 337, 342.
Inflammations, 56, 59, 73, 120, 124, 125, 131, 193, 201, 202, 205, 209, 216, 218, 219, 222, 224, 226, 2[illegible]8, 245, 246, 252, 257, 268, 272, 206, 293, 302, 3[illegible]1,

301, 320, 347, 352, 353, 371, 380, 383.
Infection, to preſerve from it, 59, 320, 342, 383.
Indigeſtion, 81, 115, 189, 222, 320.
Joints, 75, 79, 119, 124, 131, 167, 177, 189, 198, 242, 260, 290, 319, 324, 328, 336, 350.
Itch, 55, 73, 89, 90, 124, 138, 155, 167, 182, 189, 205, 207, 221, 240, 266, 293, 348, 366.
Kernels, 151, 238, 366, 377.
Kibes, 177, 202, 217.
Kidneys, 96, 134, 194, 216, 238, 382.
King's Evil, 64, 86, 109, 117, 176, 189, 217, 238, 247, 272, 316, 340, 366.
Knots in the Fleſh, 124, 129.
Laſks, 59, 129, 257, 312, 319, 325, 338.
Letchery, 200.
Leproſy, 52, 62, 73, 107, 165, 176, 177, 212, 240, 258, 272, 319, 342, 367.
Lethargy, 52, 62, 183, 220, 258, 283, 286, 323, 334, 340, 374.
Lice, 58, 97, 202, 206, 258.
Limbs, 212.
Liver, 54, 83, 98, 99, 107, 124, 140, 155, 157, 165, 177, 182, 189, 198, 199, 207, 220, 225, 238, 247, 272, 280, 314, 323, 325, 345, 352, 370, 374.
Loathing of Meat, 155, 174, 244, 325.
Longings, 244, 379.
Looſe Teeth, 300, 320, 367.
Loſs of Voice, 220.
Lungs, 54, 75, 131, 134, 176, 228, 237, 240, 260, 286, 295, 373, 374, 385.
Luſt, to provoke, 66, 77, 122, 125, 126, 247, 258, 274, 280.
Luſt, to ſtop, 199, 222, 285.
Madneſs, 202.
Mad Dogs, 50, 59, 72, 81, 169, 176, 182, 187, 266.
Mare. See Ephialtes.
Marks in the Skin, 75, 226, 241, 287, 322, 336.
Matrix, 88, 319.
Meaſles, 88, 242, 374.
Megrims, 75, 179, 354.
Melancholy, 56, 69, 90, 99, 152, 167, 173, 189, 202, 236, 246, 252, 287, 320, 351, 366, 369, 381.
Members disjointed, 179, 210, 295.
Memory, 66, 109, 163, 223, 245, 322, 334.
Milk in Nurſes, 90, 173, 222, 238, 296, 318, 382.
Milk curdling, 75.
Milk in Cattle, 129.
Mind, 54.
Mineral Vapour, 187.
Miſcarriage, 244.
Morphew, 51, 92, 138, 153, 155, 158, 166, 176, 199, 205, 222, 257, 258, 286, 327, 368, 386.
Mother, 63, 68, 81, 86, 92, 99, 166, 172, 242, 246, 251, 266, 268, 282, 292, 327, 340, 341, 366, 383.
Mouth, 56, 82, 84, 124, 238, 266, 287, 293, 301, 315, 334, 343, 352, 372, 380.
Muſcles cut, 128, 238.
Nails in the Fleſh, 53, 250.
Navels of Children, 301, 373
Neck, 168, 371.
Nerves, 75, 88.
Nits, 367.
Nipples, 179.
Nocturnal Pollutions, 198.
Noiſe in the Ears, 80, 202, 205, 240, 346.
Noſe, 210, 217.
Obſtructions of the Gall, 118, 152, 156, 237, 338, 353.
———— Liver, 50, 55, 75, 80, 168, 175, 182, 206, 237, 240, 242, 286, 291, 314, 328, 338, 346, 352, 353, 370.
————Spleen, 55, 66, 80, 182, 206, 237, 240, 242, 286, 314, 346, 353, 370, 382.
————Reins, 257, 274, 382.
Pains, 59, 73, 153, 255, 297, 367.
—— in the Bowels, 354, 386.
———— Sides, 73, 96, 124, 240, 327, 342.
————Reins, 49, 68.
————Back and Belly, 57, 59, 133.
————Ears, 240, 296, 320, 325, 328, 346, 366.
———— Head, 297, 320, 330, 374.
Palſy, 123, 124, 169, 175, 189, 211, 212, 223, 236, 249, 292, 340.
Peſtilence, or Plague, 59, 69, 90, 99, 115, 121, 138, 154, 157, 182, 212, 223.
Phthiſic, 59, 115, 198, 224, 254, 275, 284, 293, 325.
Phlegm, 90, 101, 108, 125, 138, 158, 173, 176, 187, 202, 220, 246, 282, 312, 341, 373, 378, 386.
Piles, 88, 131, 138, 216, 244, 286, 293.
Pimples, 136, 178, 182, 208, 216, 320, 327, 342, 353.
Pin and Web, &c. 200, 223.
Piſſing Blood, 54, 85, 97, 121, 133, 207.
Pleuriſy, 227, 238, 297, 341.
Poiſon, 69, 73, 88, 90, 91, 99, 109, 138, 154, 158, 166, 173, 187, 223, 227, 238, 240, 247, 272, 292, 312, 327, 350, 353, 372, 381.
Polypus, 138, 266, 295.
Privities, 131, 218, 224.
Purples, 86, 374.
Puſhes, 123, 131, 179, 296, 350, 353, 387.
Quartan Agues, 64, 203, 281, 295, 311.
Quotidian Agues, 131, 167.
Quinſy, 88, 124, 132, 204, 227, 275, 316, 381, 383.
Rheum, 131, 132, 179, 207, 212, 217, 242, 246, 266.
Reins, 61, 66, 167, 172, 175, 216, 221, 238, 291, 297, 320, 325, 327, 328, 340, 367, 374, 381.
Reds, 64, 319.
Rickets, 158, 345.
Ringworms, 90, 92, 109, 116, 153, 200, 205, 224, 268, 327, 340.
Ruptures, 69, 92, 106, 124, 128, 131, 151, 165, 172, 187, 208, 218, 238, 275, 317, 328, 336, 337, 367.
Sadneſs. See Melancholy.
Scabby-heads, 68, 88, 118, 182, 223, 266, 374.
Scabs, 54, 57, 72, 75, 97, 101, 123, 135, 154, 182, 189, 212, 221, 246, 266, 268, 354, 384.
Scars, 106, 135, 322.
Sciatica, 64, 66, 75, 124, 134, 153, 175, 211, 212, 236, 258, 289, 292, 312, 349, 333.
Serpents biting, 52, 56, 216, 293, 376.
Scurvy, 95, 136, 212, 240, 312, 318.
Seed, to increaſe, 124, 167.
Shingles, 124, 282, 293.
Sinews, 68, 75, 101, 123, 157, 175, 194, 241, 255, 272, 342, 385.
Skin, 138, 189, 289, 343.
Small Pox, 51, 86, 242, 318, 330.
Smell loſt, helpeth, 63.
Sneezing, 59, 241, 284.
Sores, 52, 88, 101, 109, 197, 246, 292, 334, 340, 343, 352, 374, 383.
Speech loſt, 223.
Spleen, 50, 64, 95, 135, 155, 165, 167, 172, 212, 236, 238, 249, 275, 295, 343, 366, 374, 385.
Splinters, 54, 64, 153, 167, 198, 379.
Stitches, 68, 81, 96, 108, 165, 187, 334.
Stomach, 59, 73, 81, 121, 138, 165, 187, 205, 209, 212, 226, 240, 246, 283, 319, 322, 352, 374.
Stoppings, 57, 66, 156.
Stone, 68, 77, 83, 94, 101, 124, 173, 187, 193, 212, 221, 242, 251, 272, 280, 291, 318, 325, 347, 372.
Stranguary, 56, 59, 216, 224, 246, 280, 318, 349, 367,
Sun-burning, 80, 133, 158.
Surfeits, 101, 224, 297.
Swellings, 94, 107, 131, 151, 153, 165, 211, 223, 242, 246, 292, 315, 330, 337, 341, 350, 373, 381, 387.
Swoonings, 69, 90, 187, 251.
Teeth, 58, 175, 236, 284, 352.
Teneſmus, 132.
Terms, to provoke, 59, 62, 63, 94, 99, 117, 153, 166, 172, 183, 212, 136, 240, 266, 275, 340, 372, 382.
—— to ſtop, 59, 86, 115, 124, 134, 193, 198, 209, 224, 254, 268, 283, 301, 337, 347, 366, 374.
Tendons, 286.
Tetters, 81, 109, 200, 206, 246, 293, 328, 340, 347.
Teſticles, 254.
Thirſt, 222, 293, 347, 381.
Throat, 63, 90, 109, 138, 154, 217, 381.
Thruſts, 52.
Thorns, 53, 115, 125, 168.
Tooth-ach, 51, 180, 204, 258, 297, 317, 366, 383.
Travail in Women, 192.
Trembling, 133, 155, 220.
Tumours. See Swellings.
Venom, 340, 372.
Vermin, 72.
Veins broken, 216, 334.
Venery, 77, 222, 268, 318.
Vertigo, 49, 50, 75, 78, 109.
Vomiting, 52, 66, 153, 218, 246, 251, 312, 320, 336, 374, 385.
Ulcers, 50, 53, 55, 59, 64, 91, 99, 106, 115, 118, 123, 131, 151, 153, 157, 165, 172, 175, 177, 180, 190, 199, 203, 207, 242, 249, 266, 291, 293, 311, 319, 328, 335, 340, 345, 346, 352, 366, 373, 379.
Uvula, 217, 255, 258, 266.
Warts and Wens, 176, 210, 280, 370.
Watchings, 152, 199, 202, 209, 222.
Weearineſs, 78, 81, 206, 266.
Wheals, 92, 179, 296, 349.
Wheezings, 99, 174, 204, 238, 318, 348, 379.
Whitloes, 92, 260.
Whites, 52, 65, 89, 224, 311.
Wind, breaking, 57, 119, 154, 172, 176, 266, 354.
Womb, 63, 92, 132, 175, 241, 266, 367.
Worms, 51, 54, 64, 121, 156, 179, 212, 221, 266, 334, 347, 370.
Wounds, 64, 81, 88, 96, 99, 131, 183, 225, 242, 252, 272, 283, 291, 328, 342, 367, 374, 379, 384.
Wrinkles, 133.
Yellow Jaundice, 92, 95, 101, 167, 177, 187, 204, 224, 237, 246, 322, 330, 346, 353, 374, 387.

A. 1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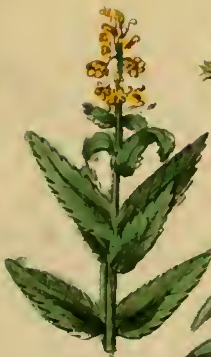
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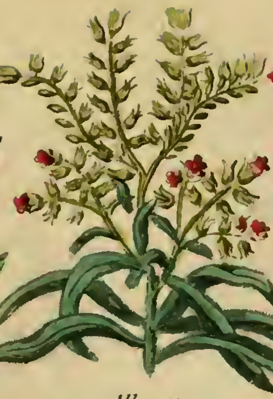
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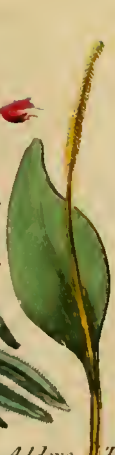
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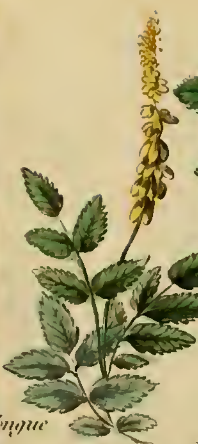
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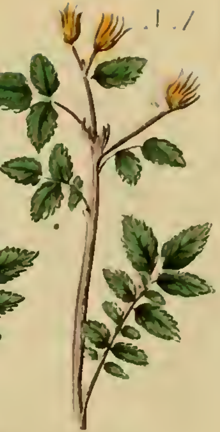
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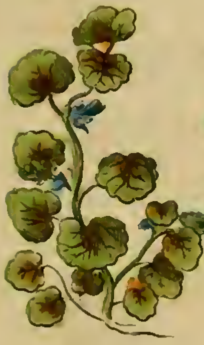
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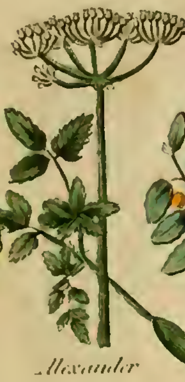
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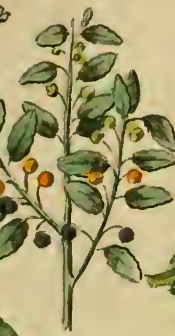
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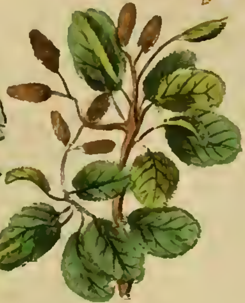
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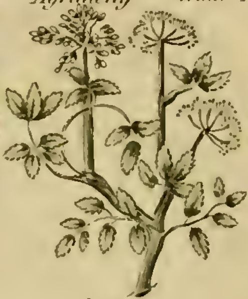
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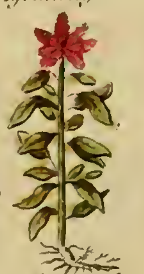
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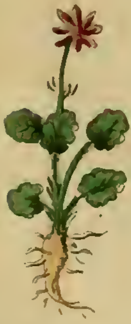
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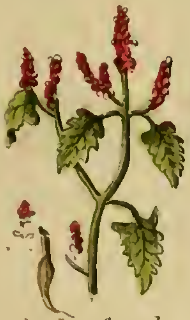
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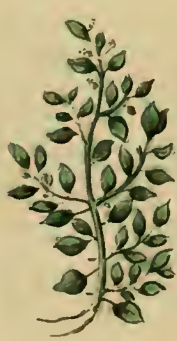
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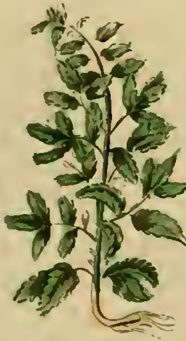
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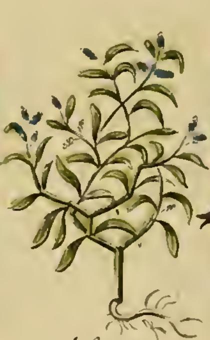
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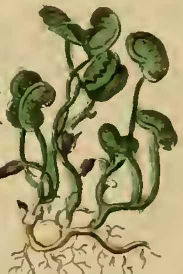
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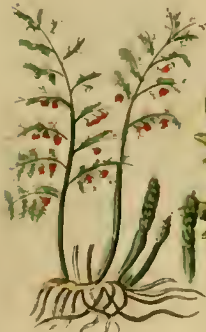
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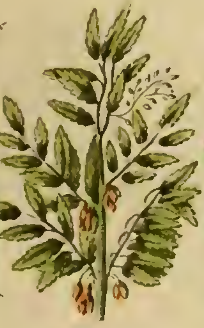
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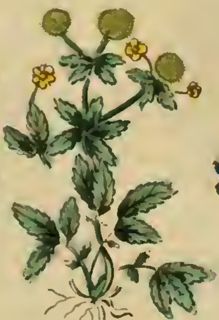
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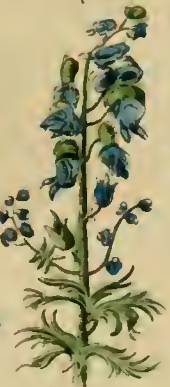
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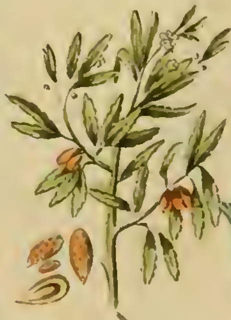
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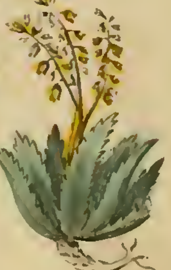
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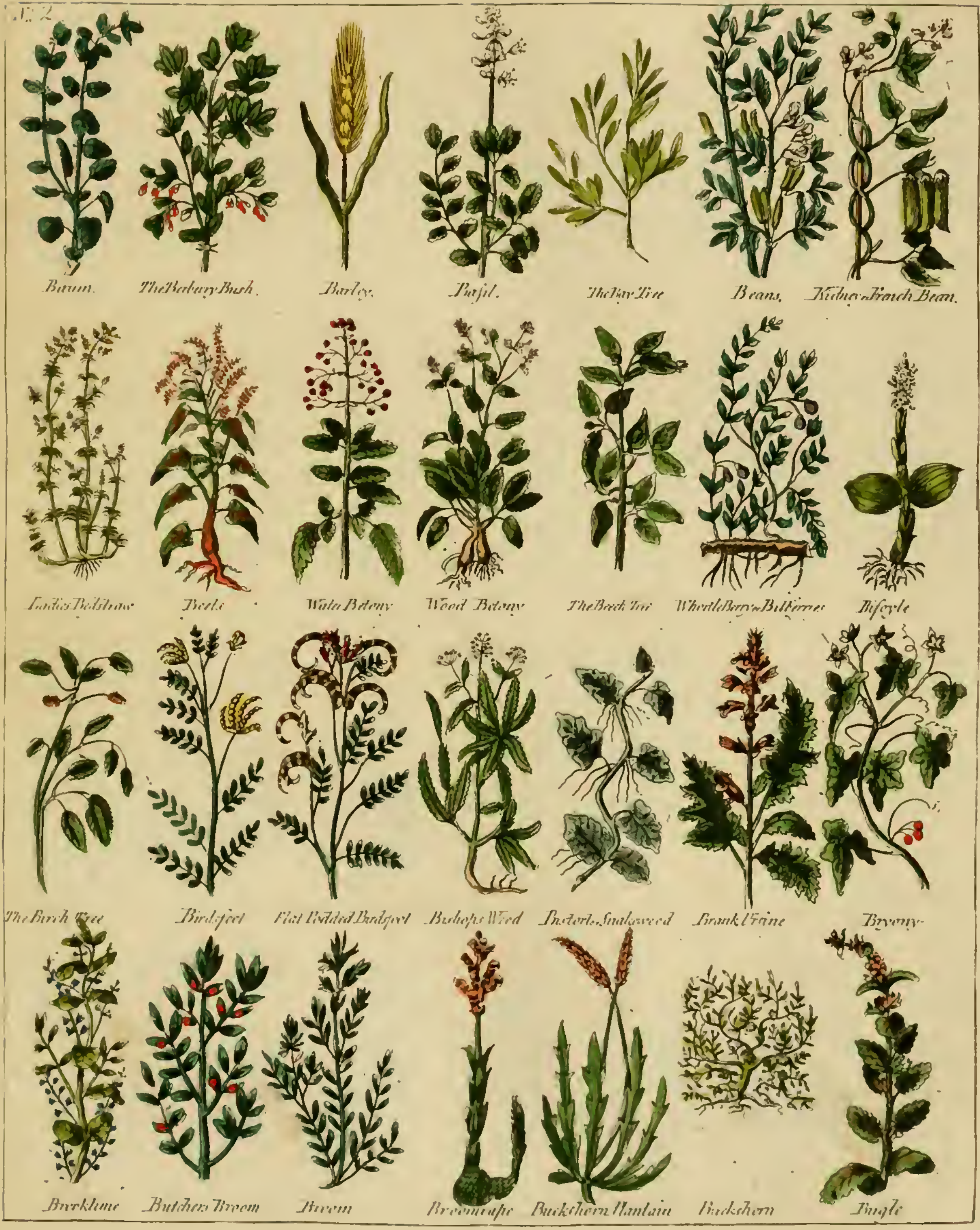
No. 2
Baum.
The Barbary Bush.
Barley.
Basil.
The Bay Tree
Beans.
Kidney or French Bean.
Ladies Bedstraw
Beets
Water Betony
Wood Betony
The Beech Tree
Whortle Berry or Bilberries
Bifoyle
The Birch Tree
Birdsfoot
Flat Podded Birdsfoot
Bishops Weed
Bistort or Snakeweed
Brank Ursine
Bryony
Brooklime
Butchers Broom
Broom
Broomrape
Buckshorn Plantain
Buckshorn
Bugle

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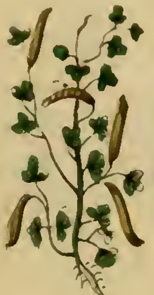
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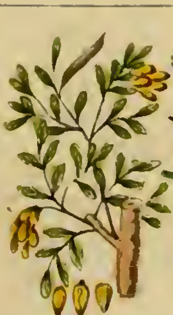
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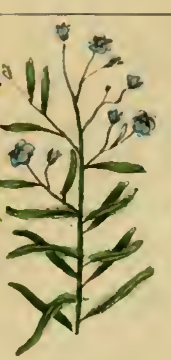
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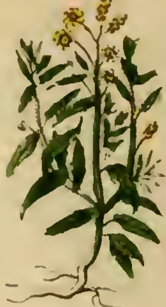
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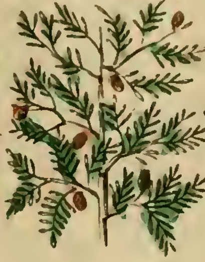
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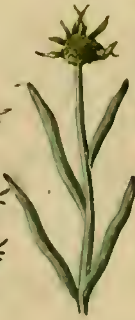
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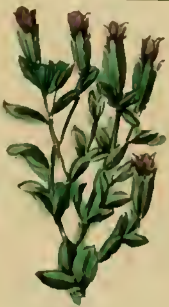
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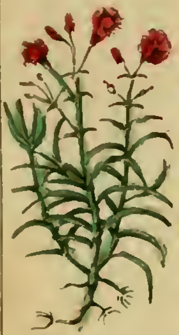
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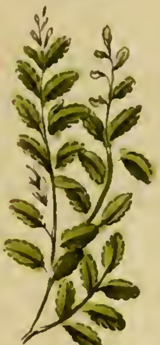
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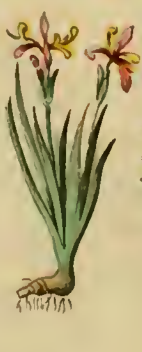
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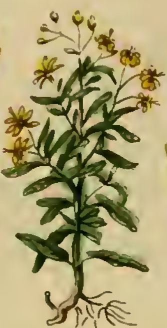
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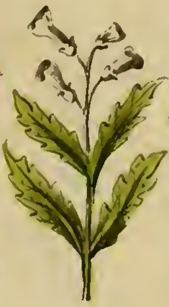
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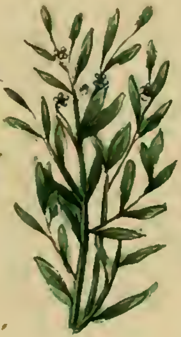
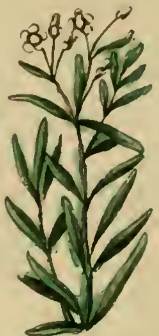

Common Gromwell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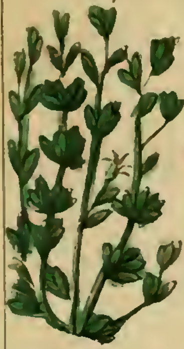
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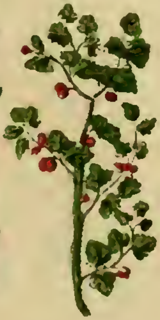
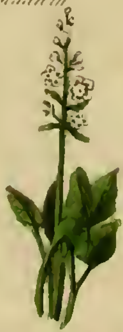
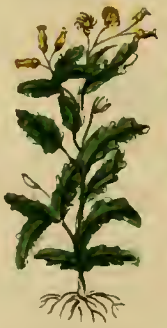
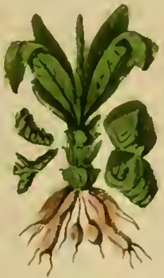
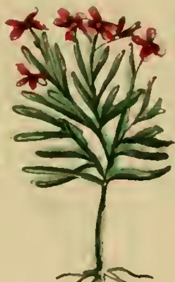
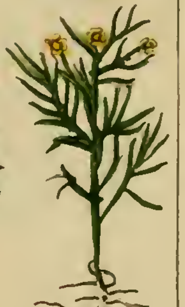

Goosberry Bush

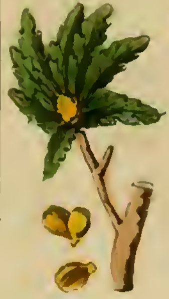

Round leav'd Winter Green

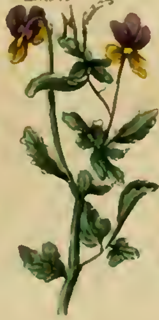

Groundsell

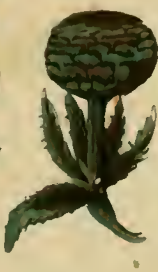

Galangal

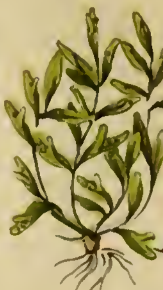

Stock Gilliflower

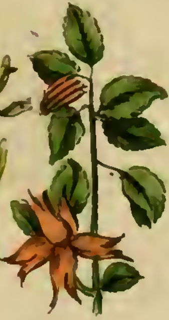

Wall or Yellow Gilliflower

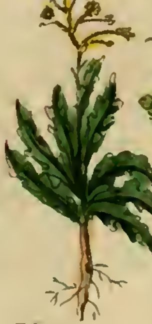

Gall Oak

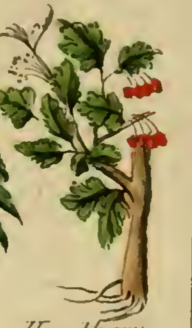

Hearts Ease


Hartichokes


Harts Tongue


The Hazle


Hawkweed


Hawthorn

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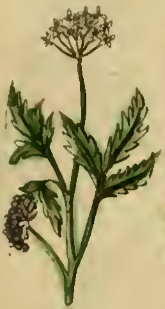
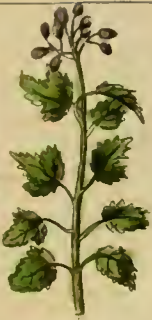
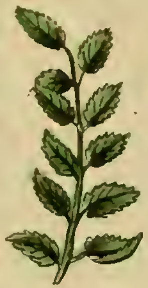
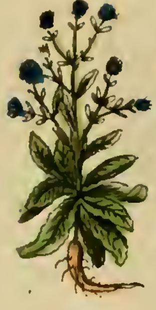
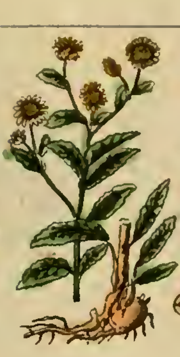
No. 4

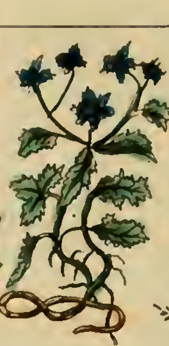

Elder

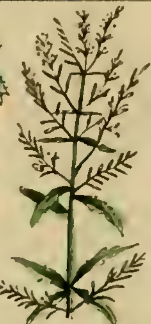

The Water Elder

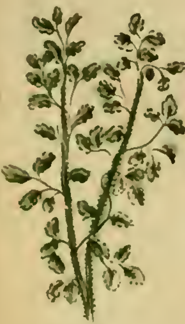

The Wych Elm

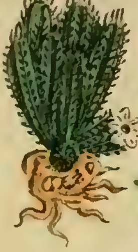

Endive

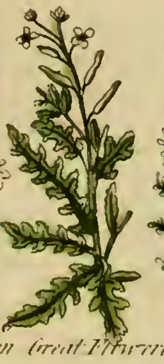

Elecampane

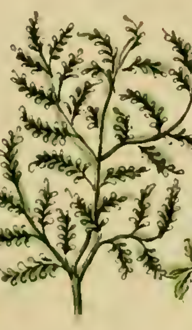

Eringo

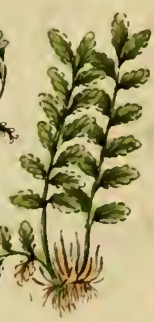

Narrow leav'd Eyebright

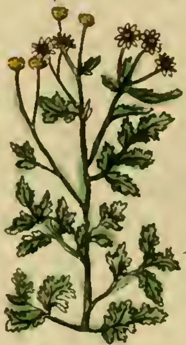

Eglantine

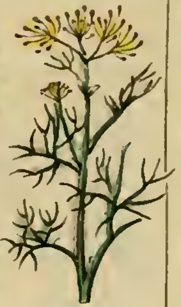

Euphorbium

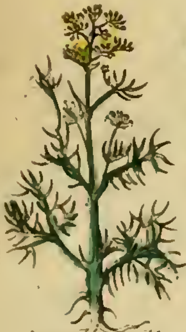

Great Flixweed
Erysimum

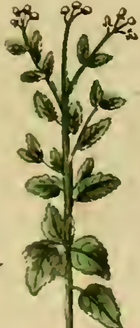

Common
Female Fern

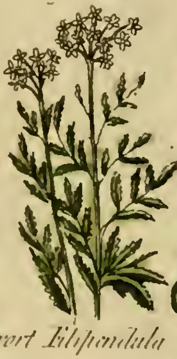

Dwarf Sea Fern


Feverfew


Fennell


Sow Fennell


Common Figwort


Filipendula

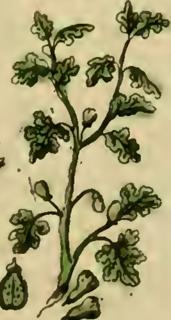
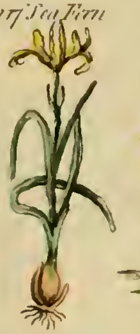
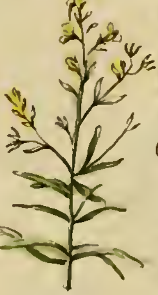
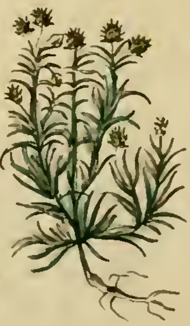
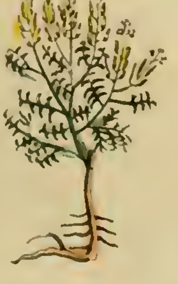


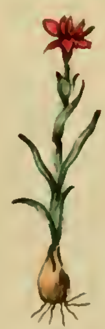
Fig Tree

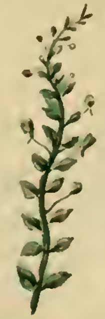

Water Flag

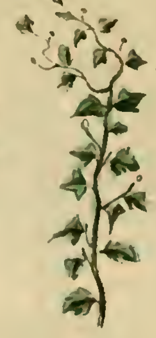

Short leav'd
Toad Flax

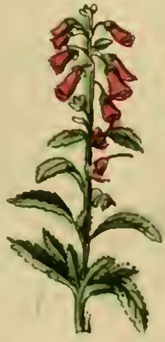

Flea wort

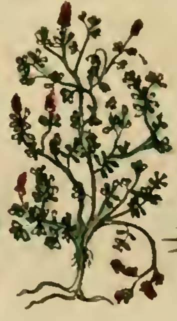

Flaxweed

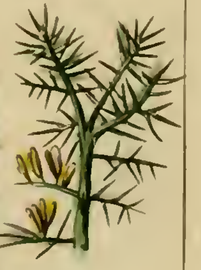

Flower de luce


Round leav'd
Fluellin


Corna leav'd
Fluellin


Foxglove


Fumitor


Common Furze

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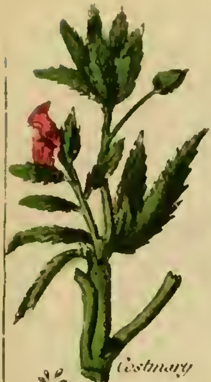
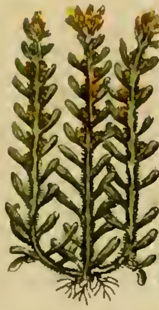
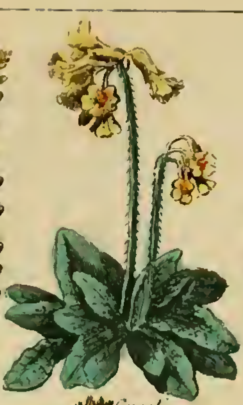
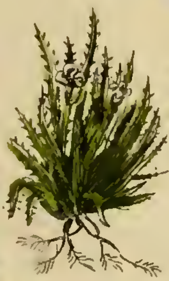
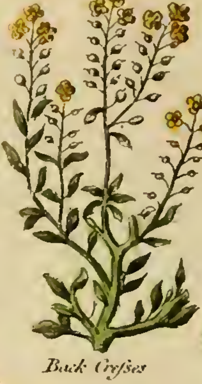
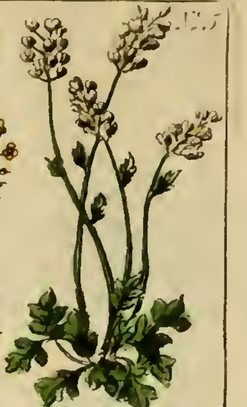

Costmary

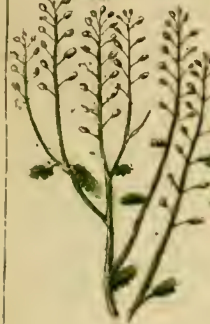

Cudweed

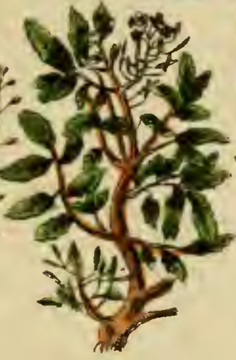

Cowslip

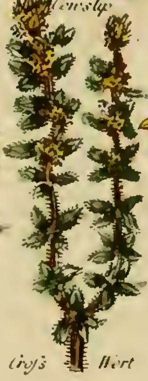

Crabs Claws

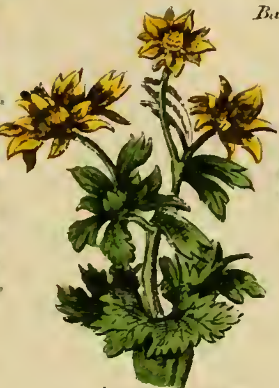

Buck Creſses

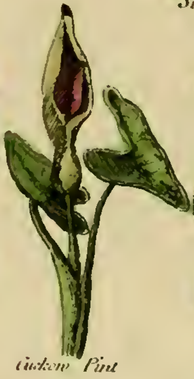

Sciatica Creſses

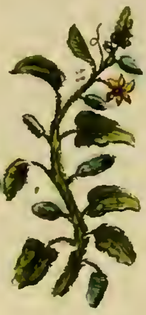

Fine leav'd Creſses

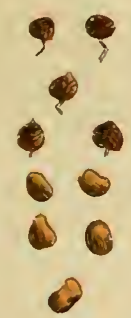

Water Creſses

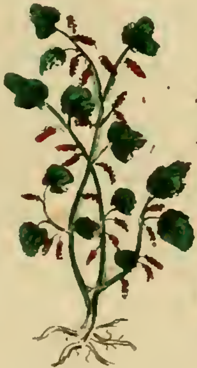

Croſs Wort

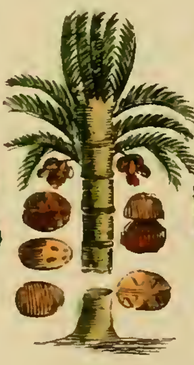

bread leav'd Crowfoot

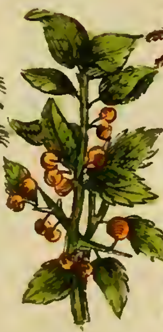

Cuckow Pint

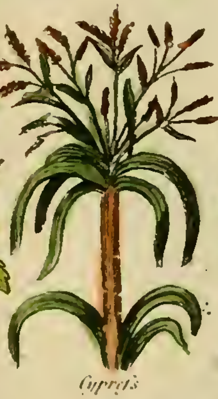

Cowcombers

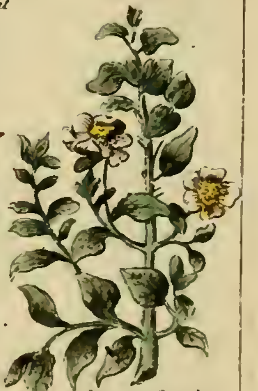

Cubebs

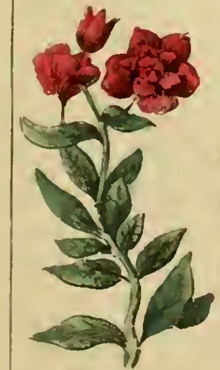

Currants

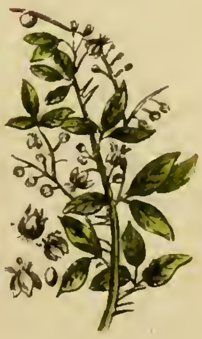

Cedar Tree

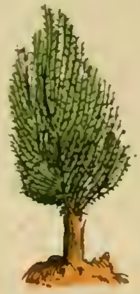

Coffee

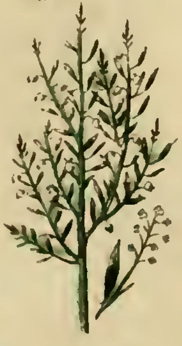

Cypreſs

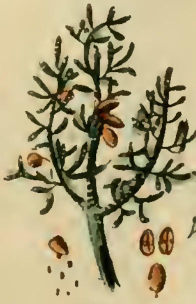

Common Female Cistus

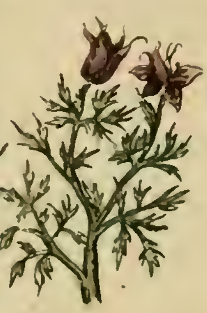

Common Male Cistus

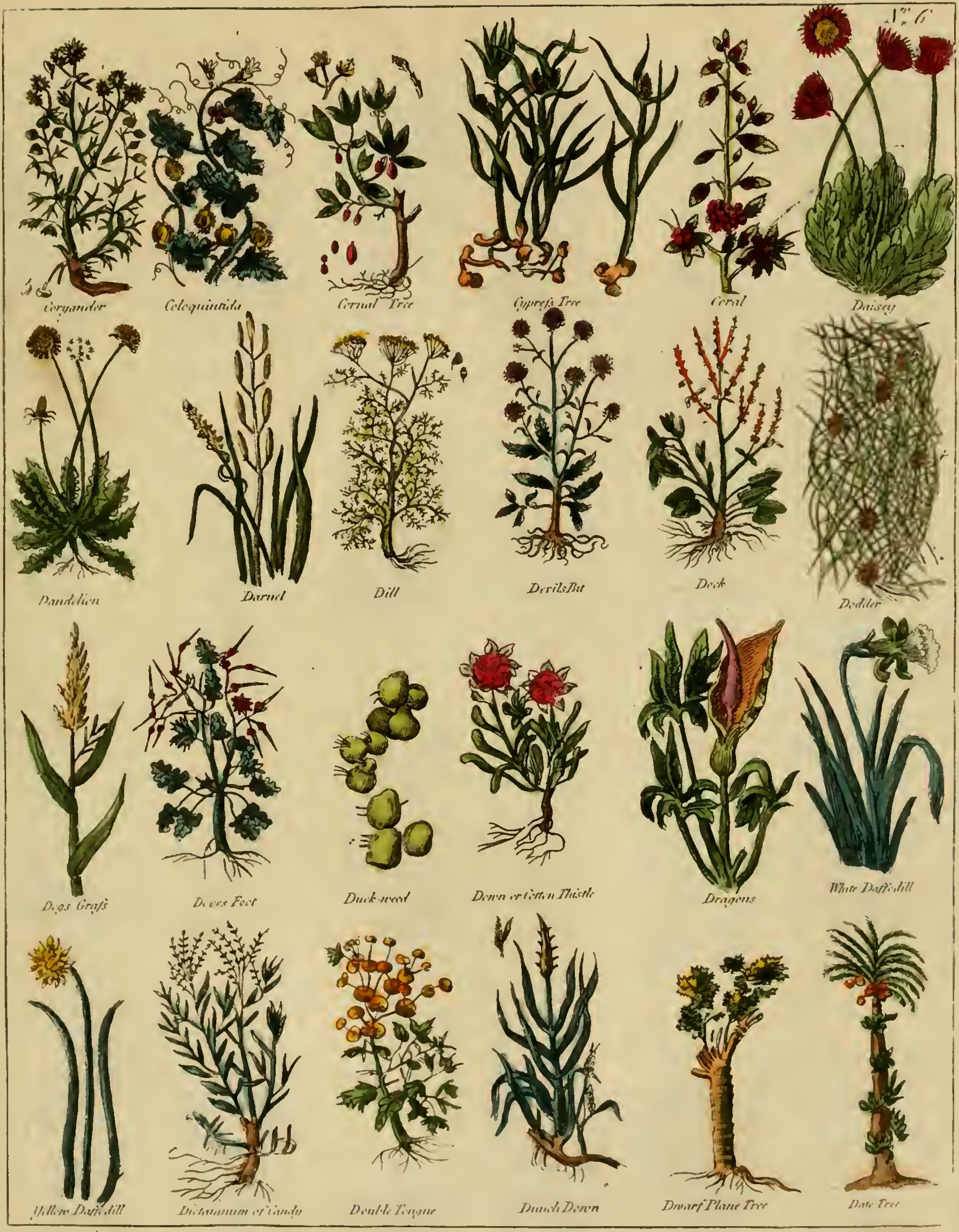

Capers

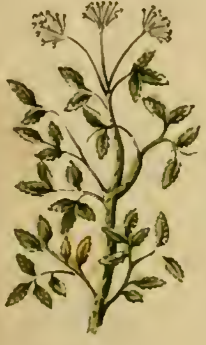

Carel Tree

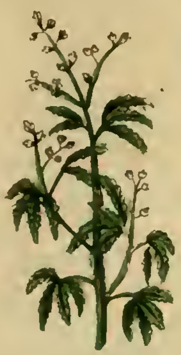

Caſsia fistula

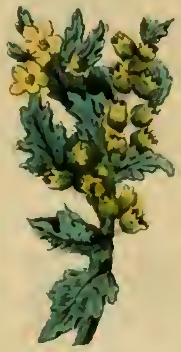

Cedar Tree

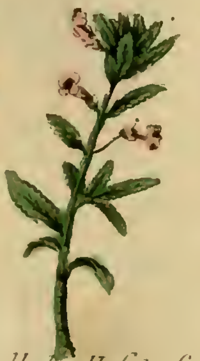

Cockle

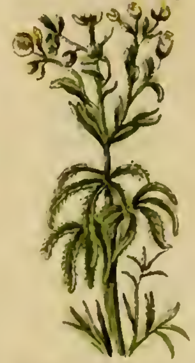

No. 6
Coryander
Coloquintida
Cornel Tree
Cypress Tree
Coral
Daisey
Dandelion
Darnel
Dill
Devils Bit
Dock
Dodder
Dogs Grass
Doves Foot
Duck-weed
Down or Cotton Thistle
Dragons
White Daffodill
Yellow Daffodill
Dictamnum of Candy
Double Tongue
Dutch Down
Dwarf Plane Tree
Date Tree


Hemlock


Common Hemp.


Common Henbane.


Hedge Hyſsop.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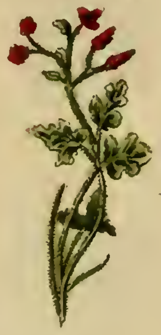
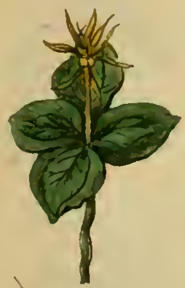
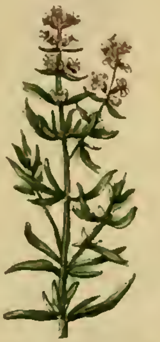
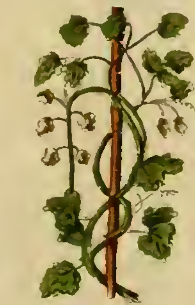
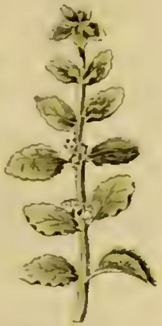

Herb Robert.


Herb Truelove.


Common Hyſsop.


Hops.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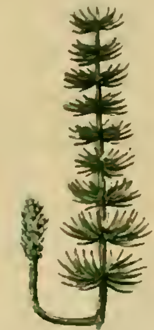
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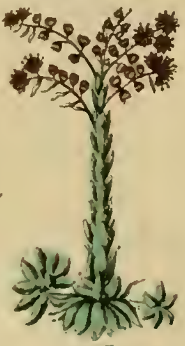
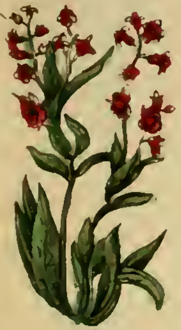
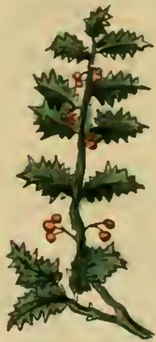
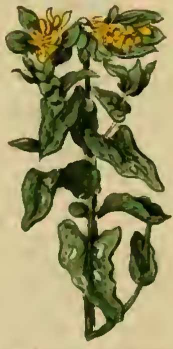
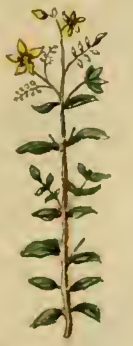
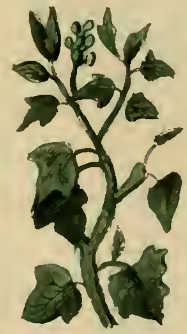

Great Houseleek.

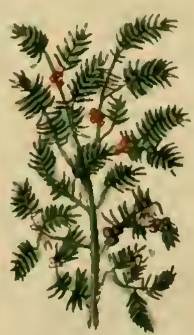

Great Houndstongue.

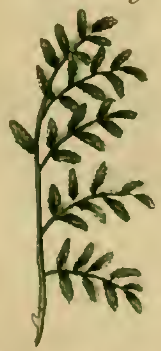

The Holly.

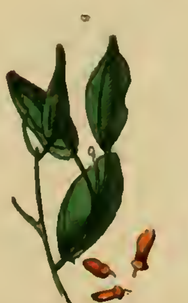

Great Honeywort.

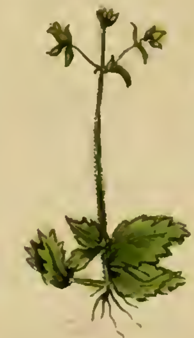

S.t Johns Wort.

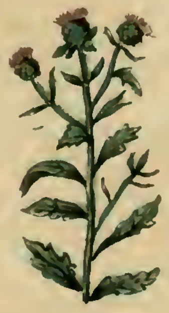

Ivy.

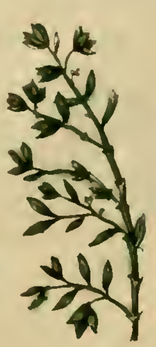

Juniper.

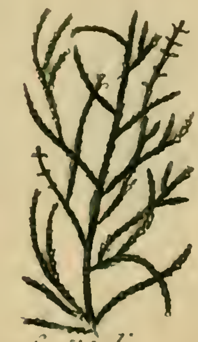

Jujube Tree

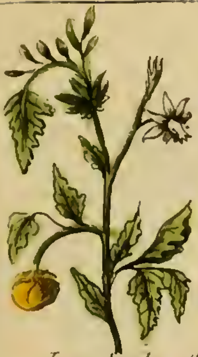

Indian Leaf.

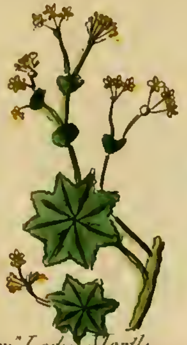

Kidney-Wort.

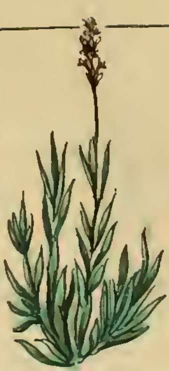

Common Knapweed.

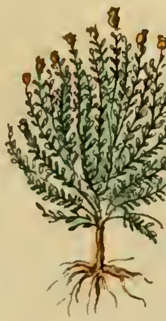

Common Knot Graſs.

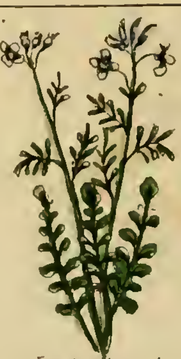

Kali.

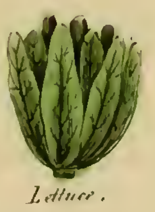

Love Apple,

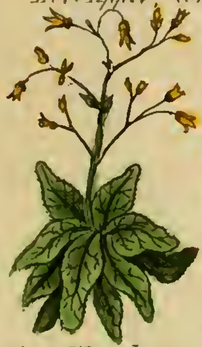

Com.n Ladies Mantle,

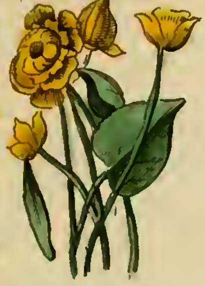

Lavender,

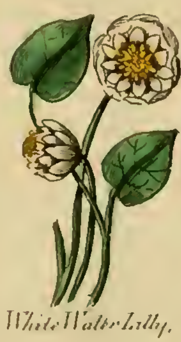

Lavender Cotton,

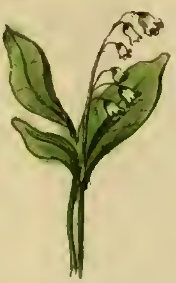

Lady Smock,

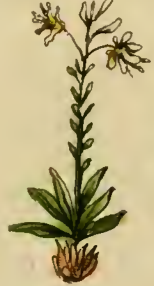

Lettuce.

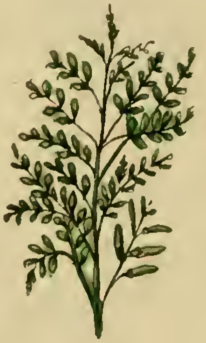

Great Wild Lettuce,

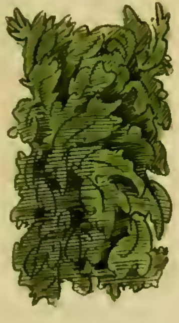

Yellow Water Lilly.

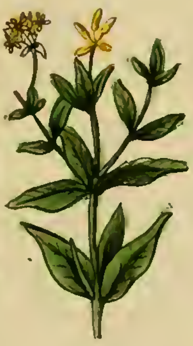

White Water Lilly,

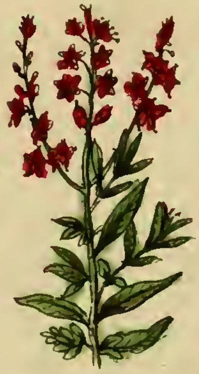

Lilly of the Valley,

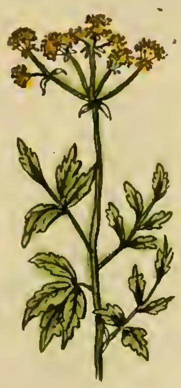

White Lilly.

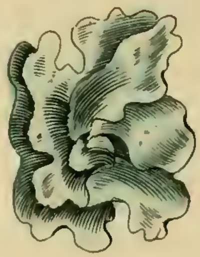

Liquorice.

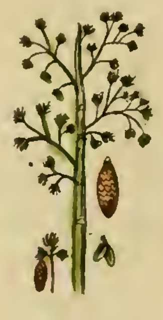

Liver Wort,

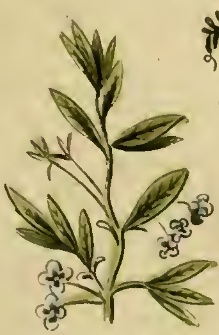

Com.n Yellow Looſestriſe

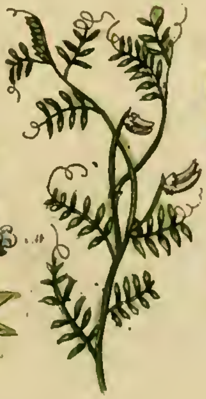

Red flowerd Looſestriſe

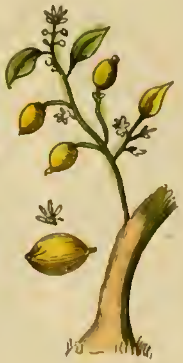

Lovage

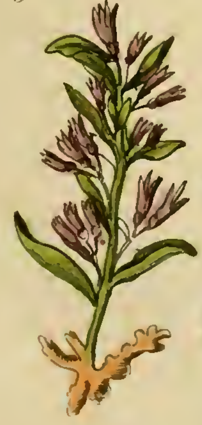

Oak Lungwort

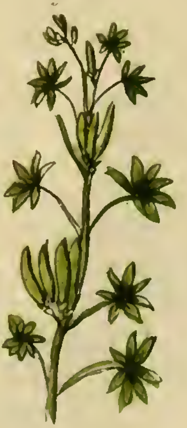

Larch Tree

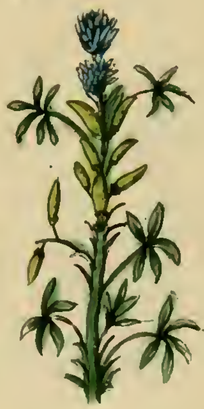

Linden Tree,

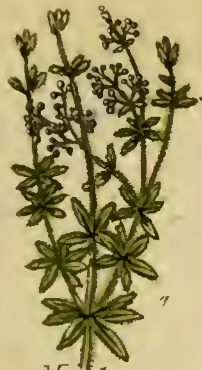

Com.n Lentil.


Lemon Tree,

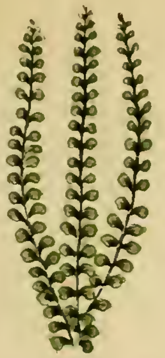

Lung Flower,


Com.n Lupine.

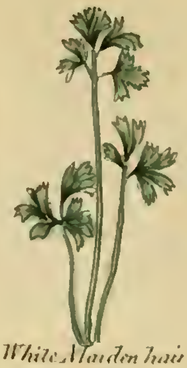

Blue Lupine.



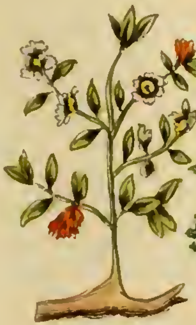
Madder,



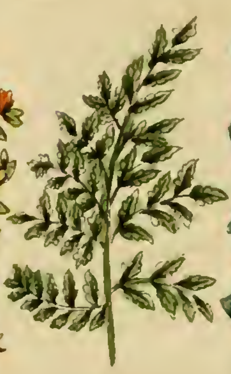
Maidenhair,



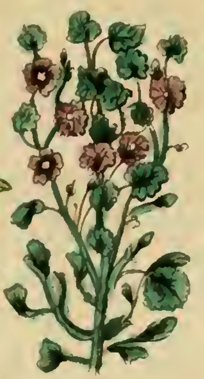
White Maiden hair,



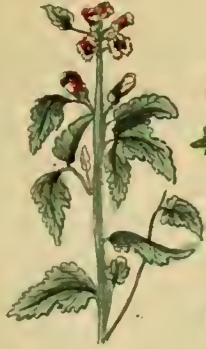
Mace Tree,



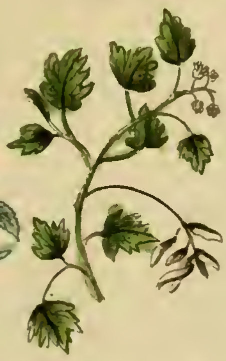
Black Maiden hair,



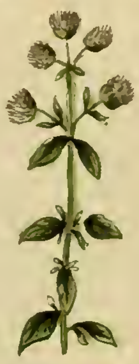
Com.ⁿ Mallow,



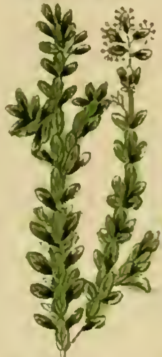
Marsh Mallow,



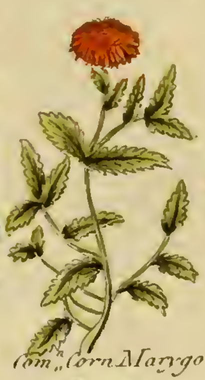
The Com.ⁿ Maple,



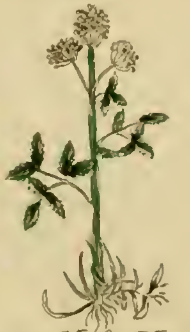
Wild Marjoram,



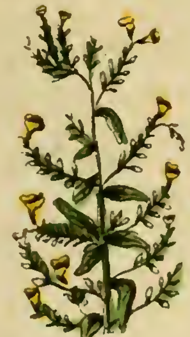
Sweet Marjoram,



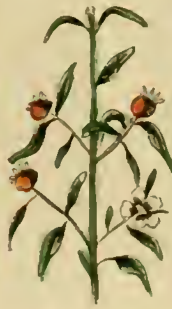
Com.ⁿ Corn Marygold,



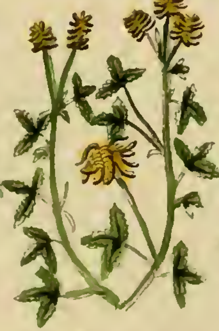
Maſter Wort,



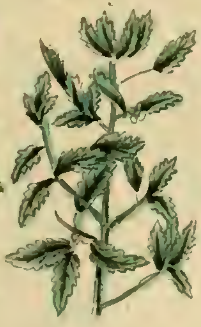
Sweet Maudlin,



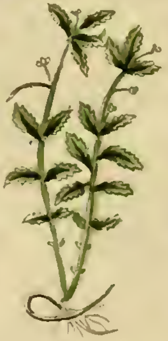
Medlar,



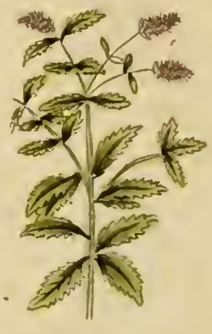
Sweet Melilot with hooked Pods,



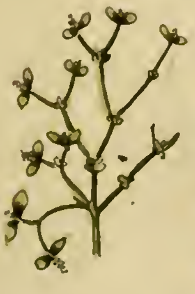
French Mercury;



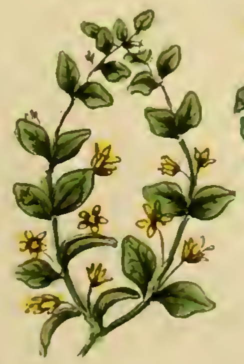
Dogs Mercury;



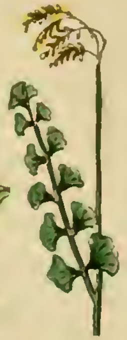
Mint,



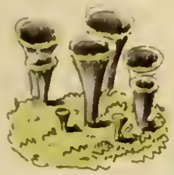
Miſseltoe,



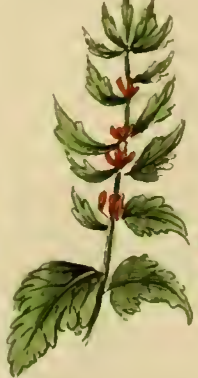
Yellow Moneywort,



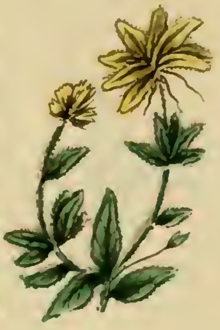
Moonwort



Com.ⁿ Cup Moſs,

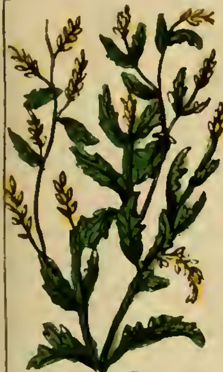


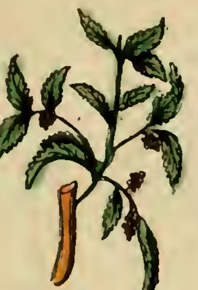
Mother wort,

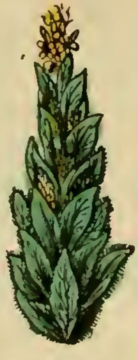


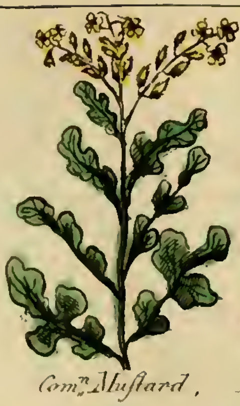
Mouse Ear,

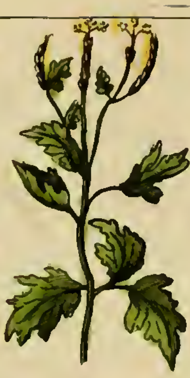
No. 10

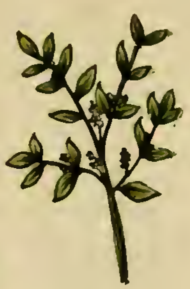

Com.n Mugwort,

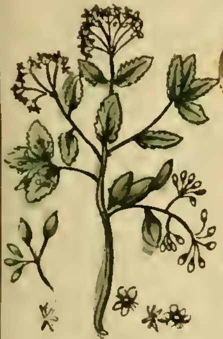

Mulberry Tree,

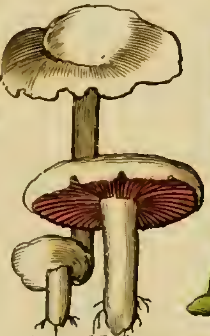

White Mullien,

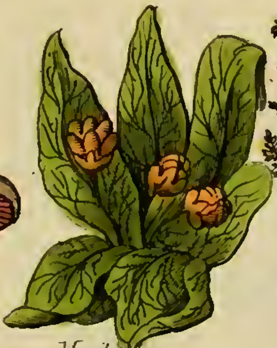

Com.n Muſtard,

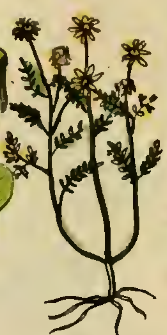

Hedge Muſtard,

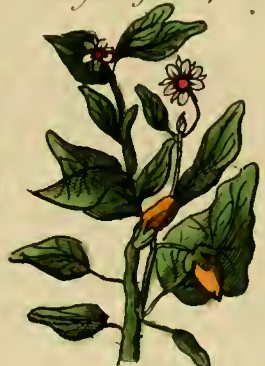

Maſtick Tree,

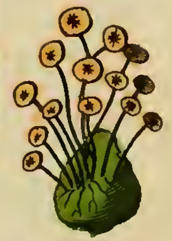

Mealy Tree,

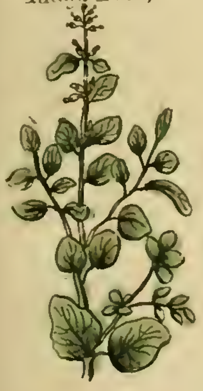

Com.n Muſhroom,

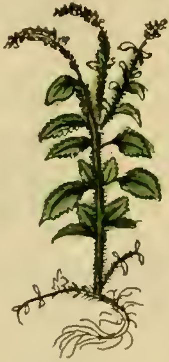

Mandrake

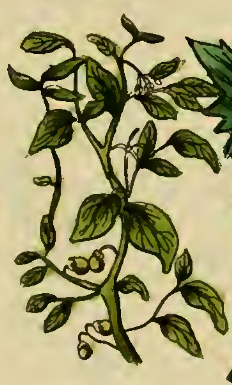

Mayweed

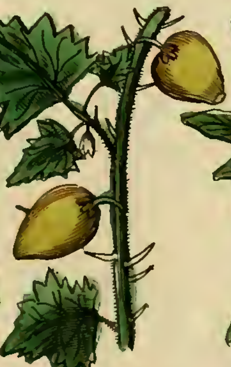

The Mad Apple

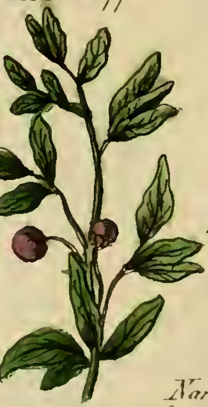

Nailwort

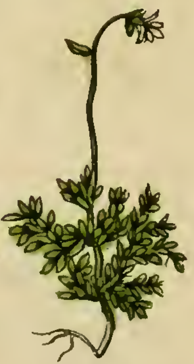

Nep,

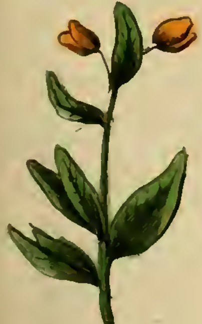

Nettle,

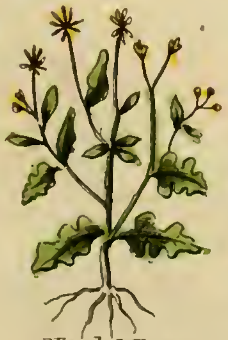

Com.n Wild Nightſhade

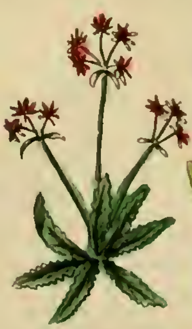

Pear fruited Nightſhade

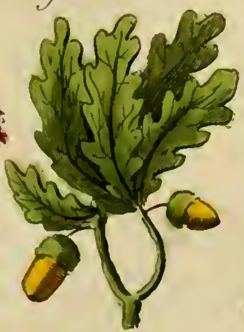

Com.n Tree Nightſhade

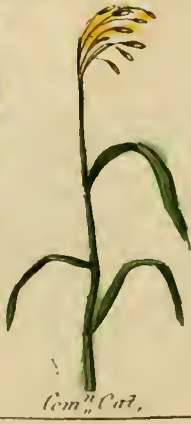

Narrow leav'd Nardwort

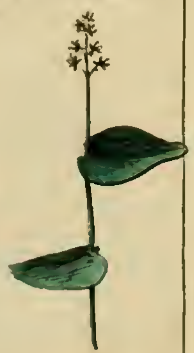

Nutmeg Tree,

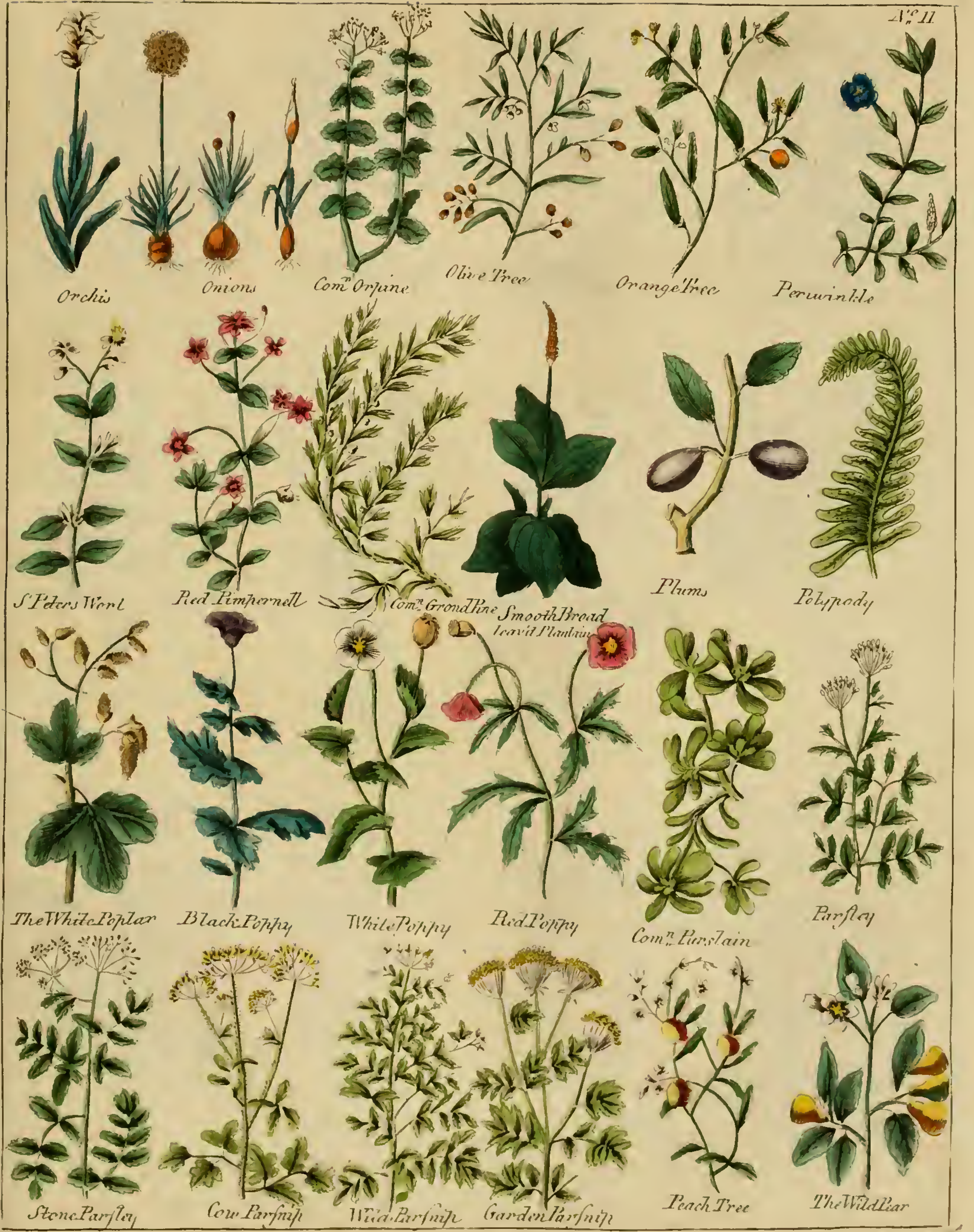

Nipple Wort,


Navel Wort,

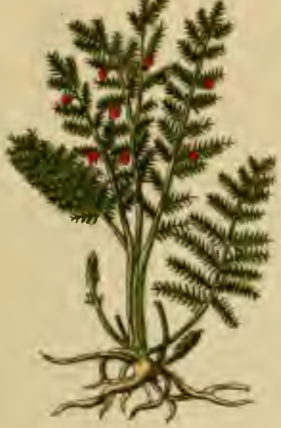

The Oak,


Com.n Oat,

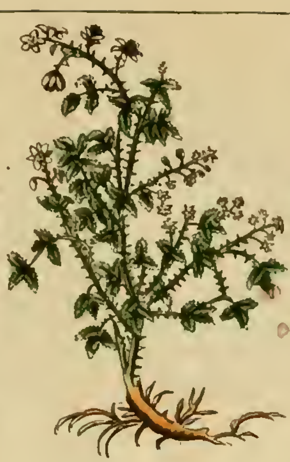

One Blade,


No. 11
Orchis
Onions
Com.n Orpine
Olive Tree
Orange Tree
Periwinkle
S.t Peters Wort
Red Pimpernell
Com.n Grond Pine
Smooth Broad leav'd Plantain
Plums
Polypody
The White Poplar
Black Poppy
White Poppy
Red Poppy
Com.n Purslain
Parſley
Stone Parſley
Cow Parſnip
Wild Parſnip
Garden Parſnip
Peach Tree
The Wild Pear

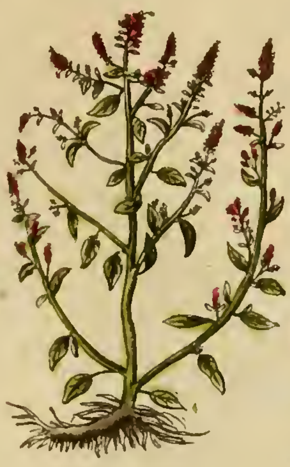
Nº 19.



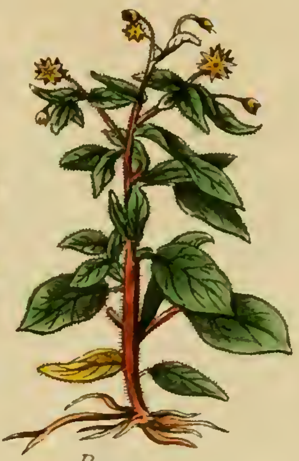
*Prickly Asparagus*



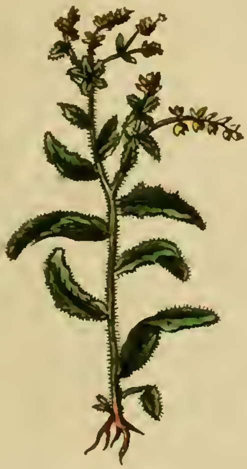
*Bramble*



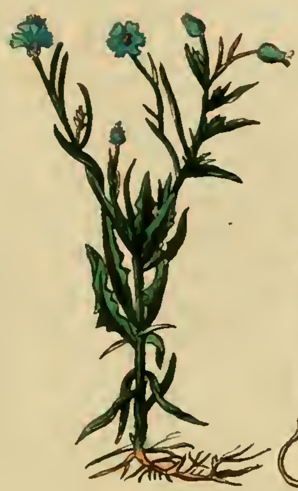
*Blites*



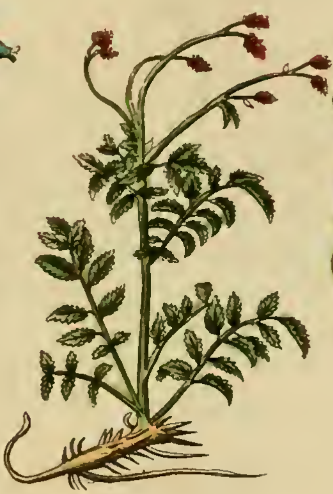
*Borage*



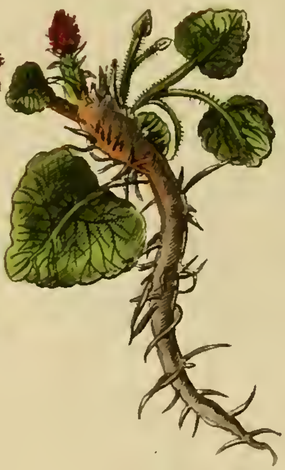
*Bugloſs*



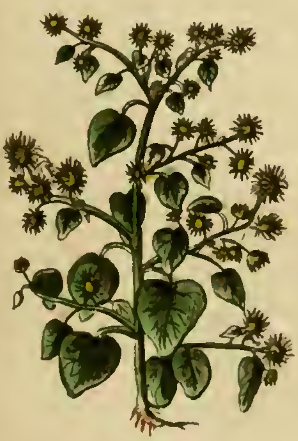
*Blue Bottle*



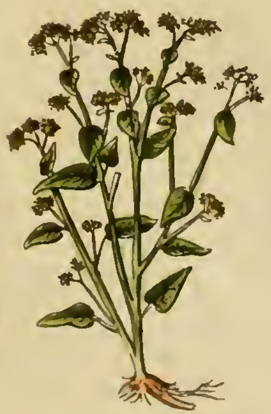
*Burnet*



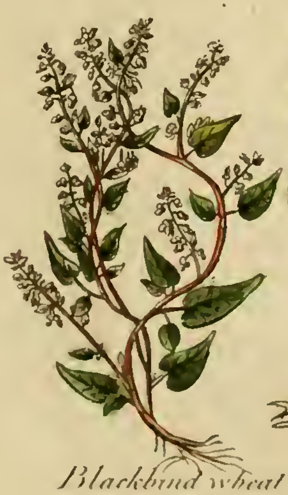
*Butter Bur*



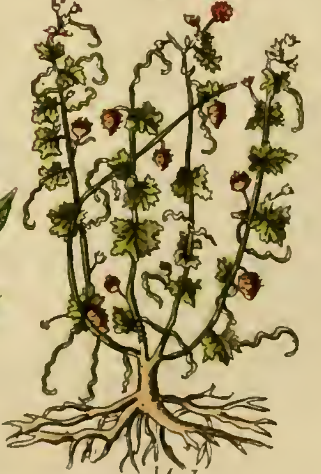
*Burdock*



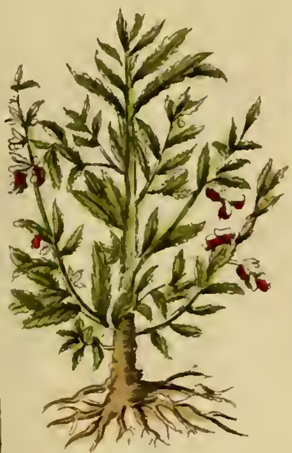
*Buck wheat*



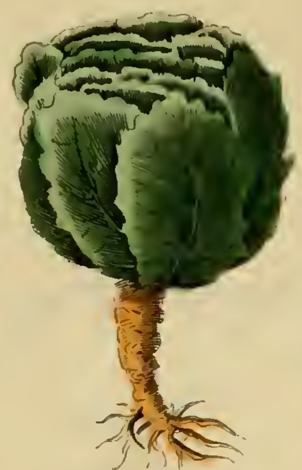
*Blackbind wheat*



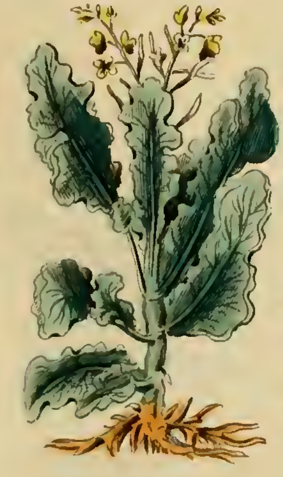
*Male Balsam tree*



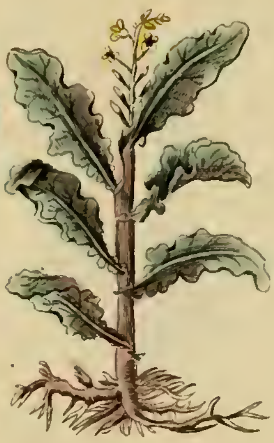
*Female Balsam Tree*



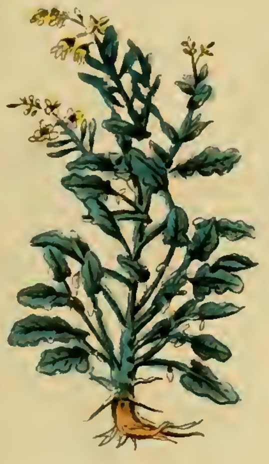
*Cabbage*



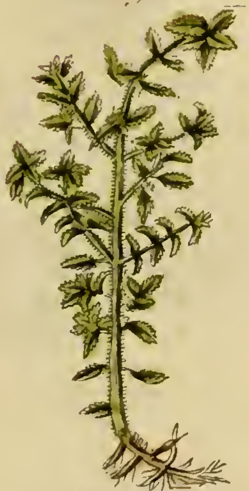
*Colewort*



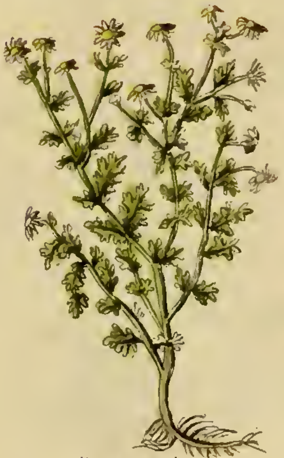
*Red Colewort*



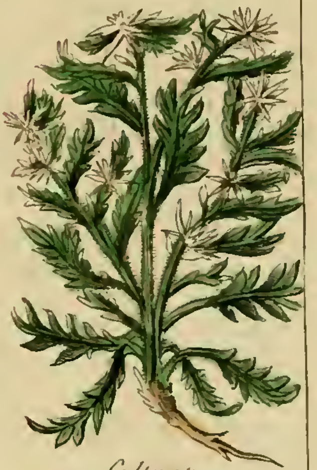
*Sea Colewort*



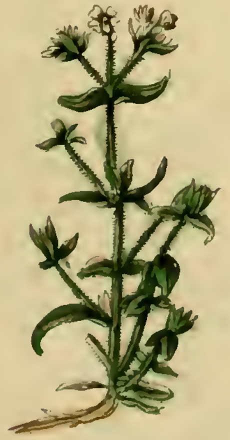
*Callamint*



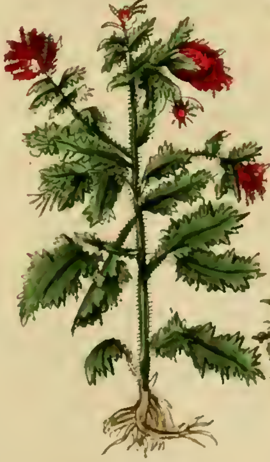
*Chamomile*



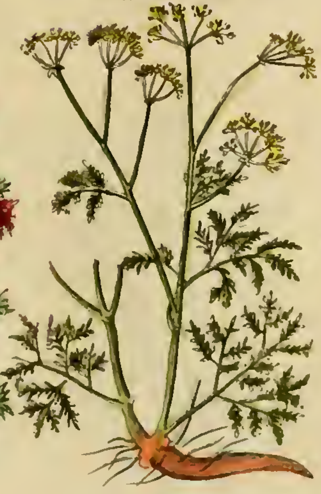
*Caltrop*



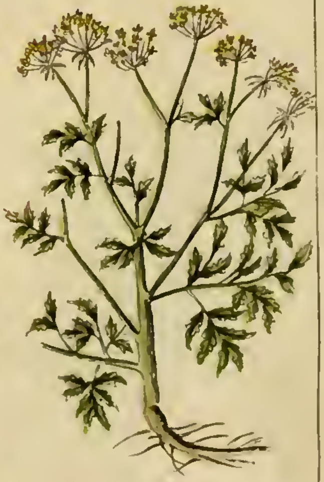
*Wild Campion*



*Carduus benedictus*

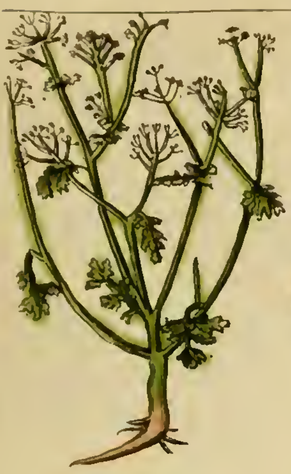


*Red Carrot*

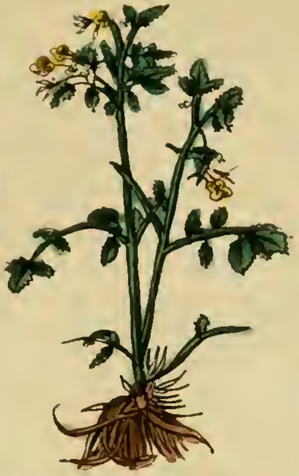


*Yellow Carrot*

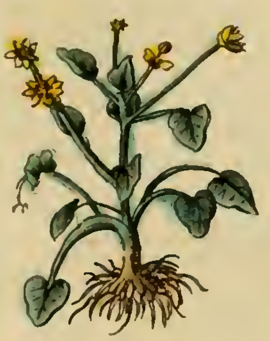
No. 11



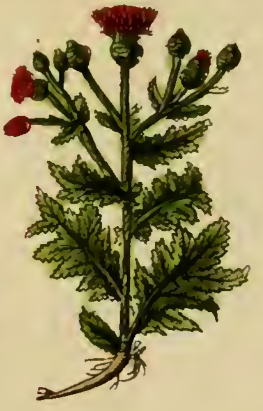
Carraway



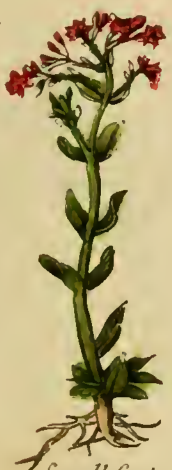
Celandine



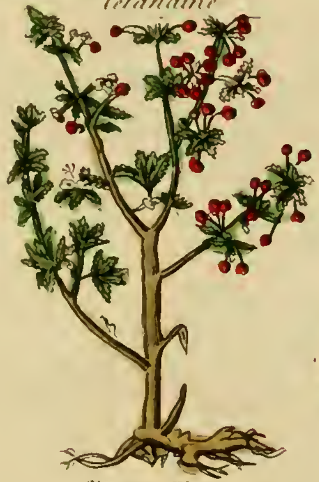
Leſser Celandine



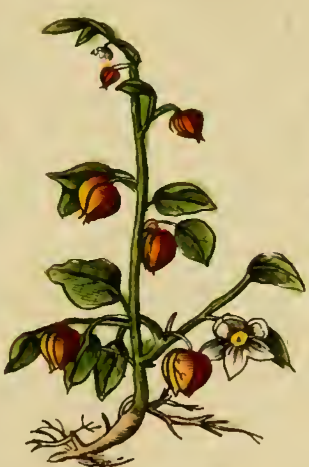
Great Centaury



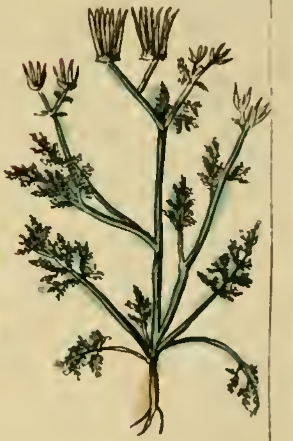
Small Centaury



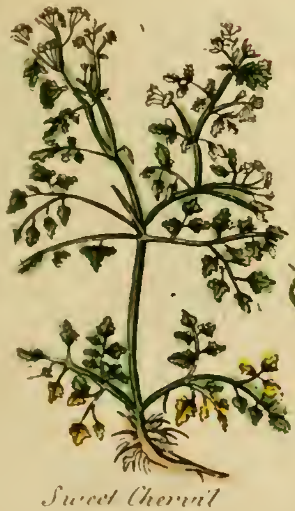
Cherry Tree



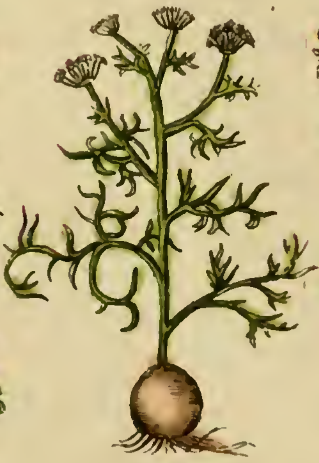
Winter Cherries



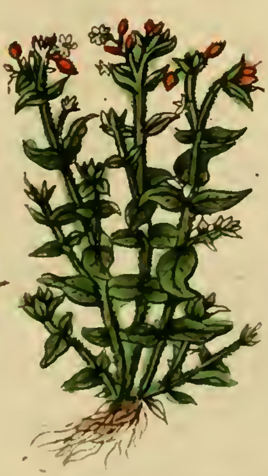
Chervil



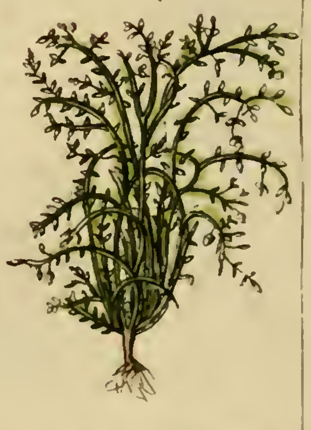
Sweet Chervil



Earth Cheſnut

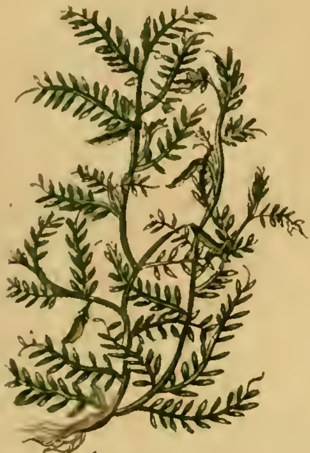


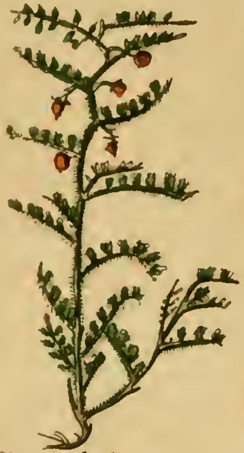
Great Chickweed

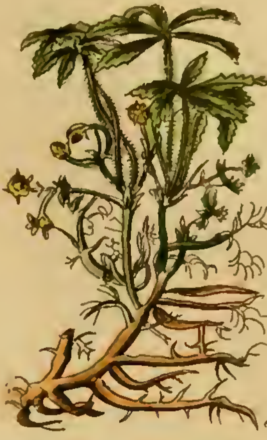


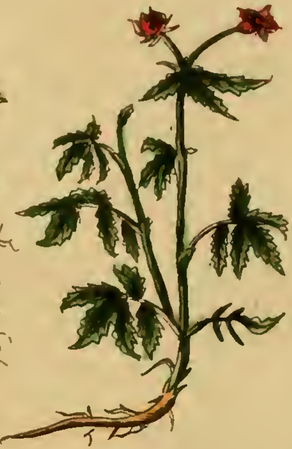
Common Chickweed

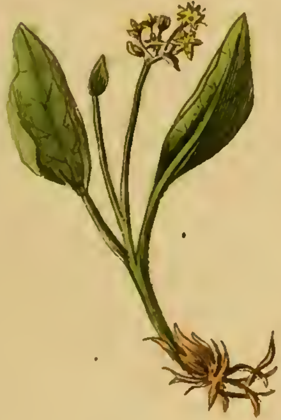
N°. 15

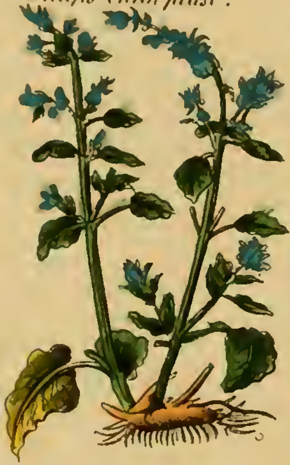

Chich pease.

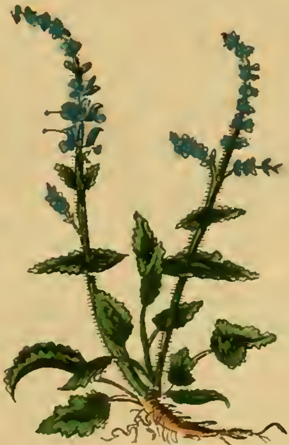

Sheeps Chich pease.

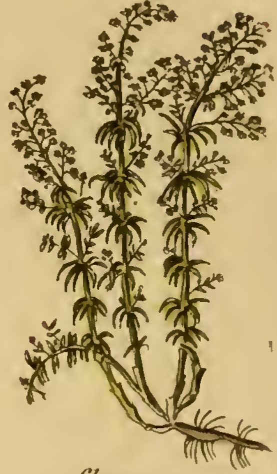

White Cinquefoil.

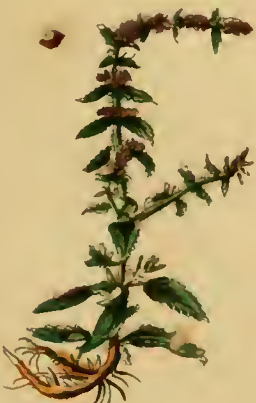

Red Cinquefoil.

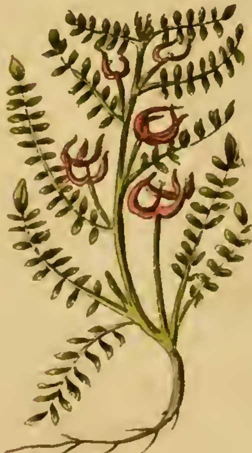

Cives.

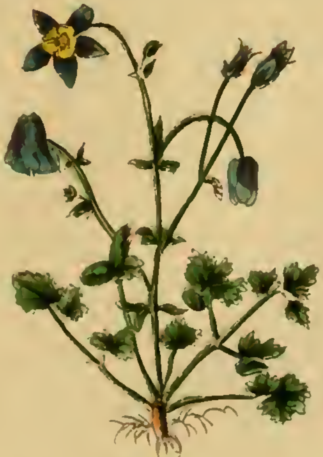

Clary.

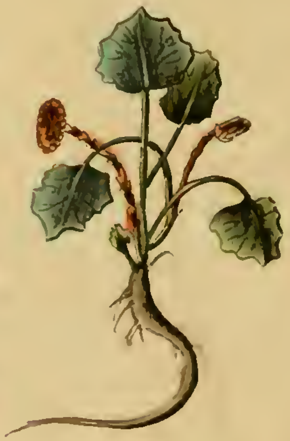

Wild Clary.

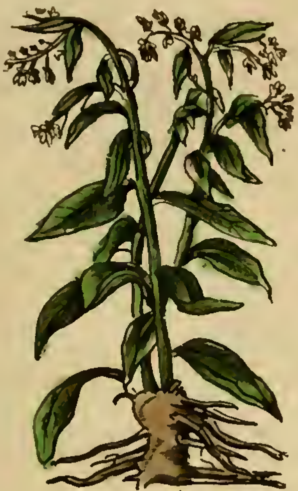

Cleavers.

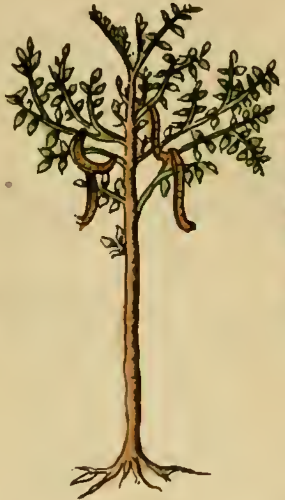

Clowns Woundwort.

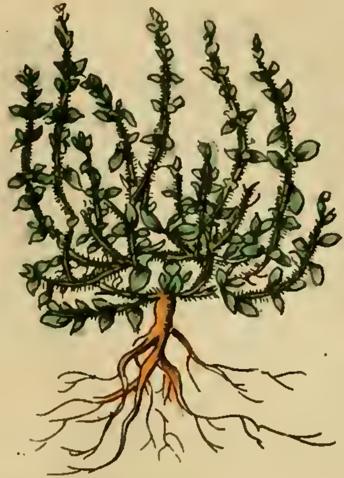

Cockshead.


Columbine.


Coltsfoot.


Comfrey.


Carob Tree.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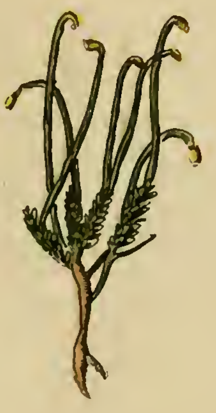
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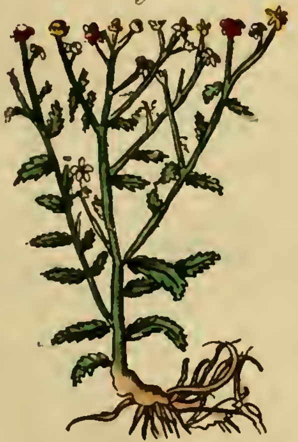
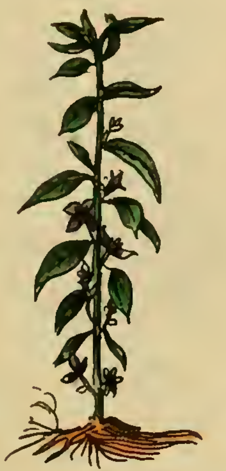
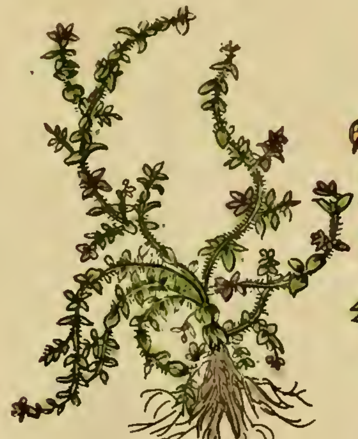
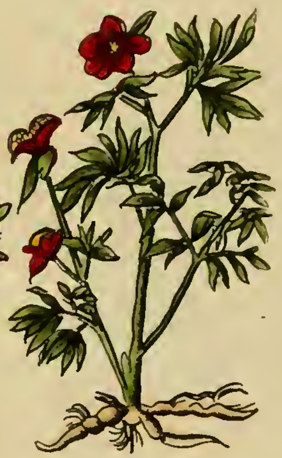
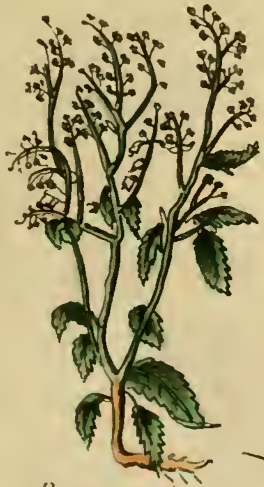
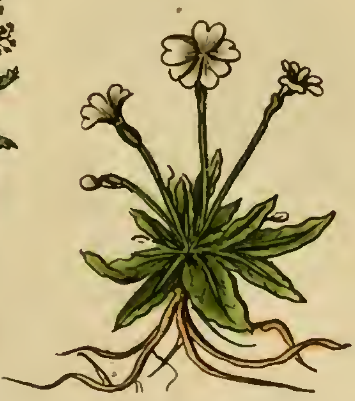

Pellitory of Spain.

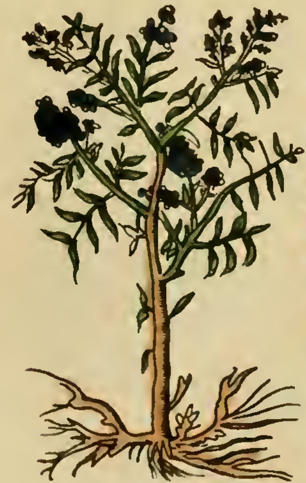

Pellitory of the Wall.


Penny Royal.


Female Pioney.


Pepper wort.


Primroses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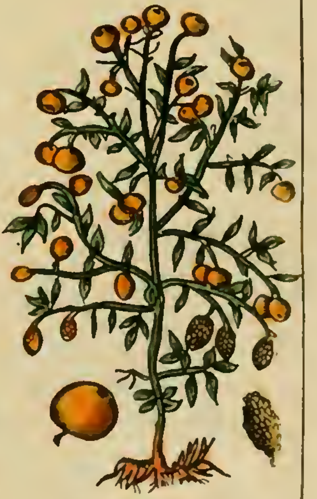
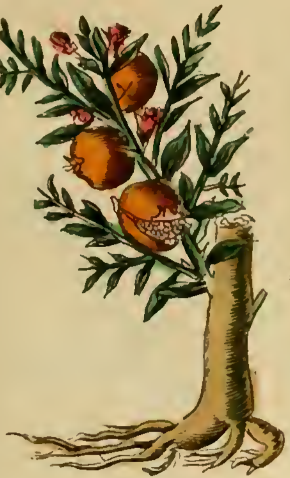
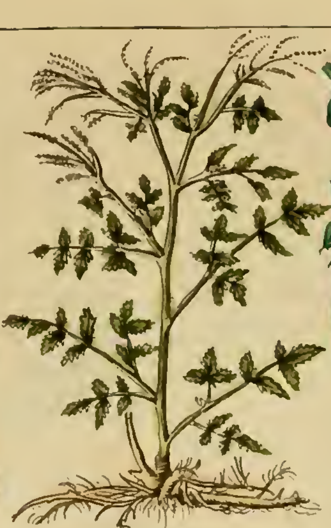
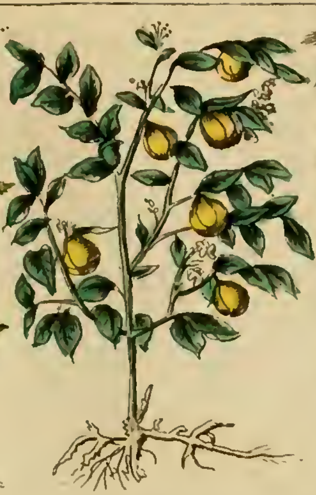
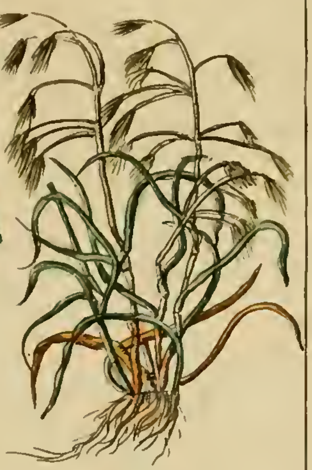
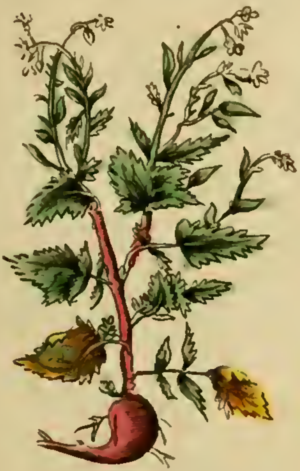

Pomecitron Tree.

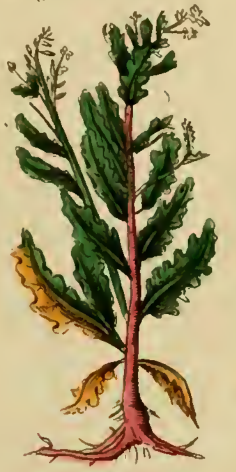

Pomegranate Tree.

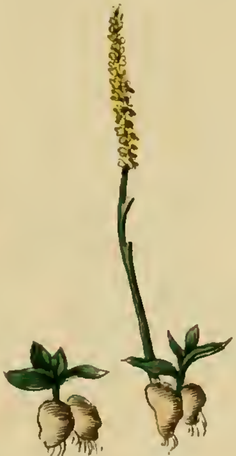

Queen of the Meadows.

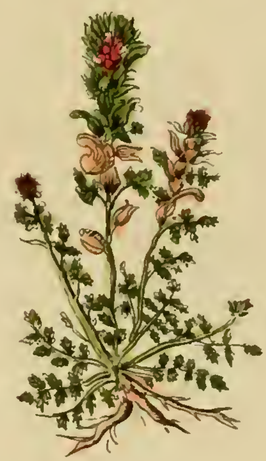

Quince Tree.

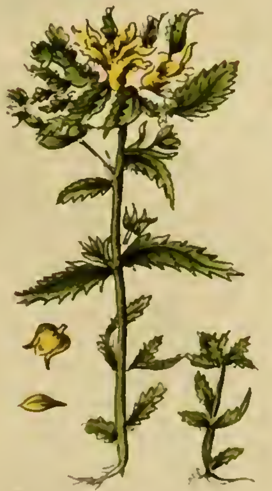

Quick Graſs.

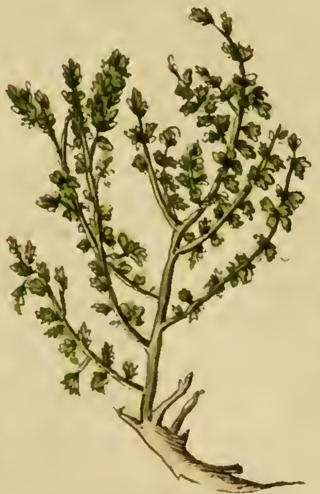

Garden Radish.

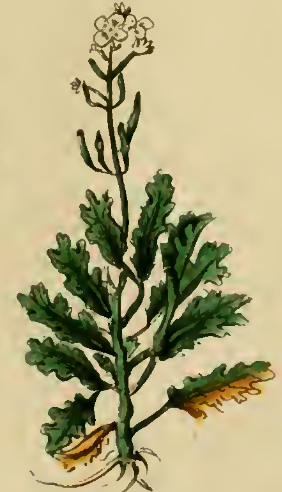

Wild Radish.

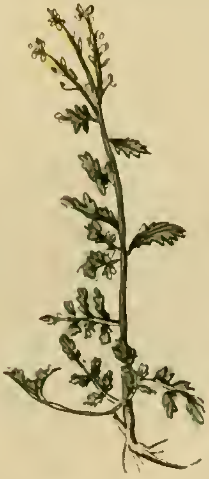

Ragwort.

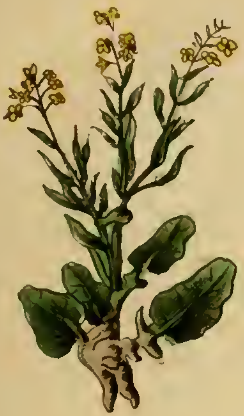

Red Rattle Graſs.


Yellow Rattle Graſs.

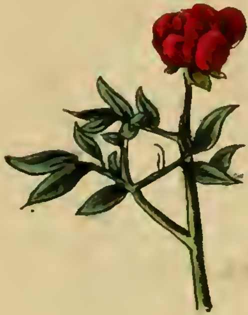

Reſt Harrow.


Rocket.

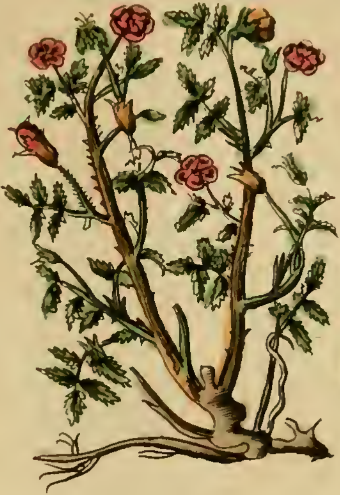

Wild Rocket.



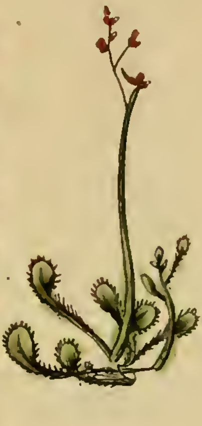
Winter Rocket.



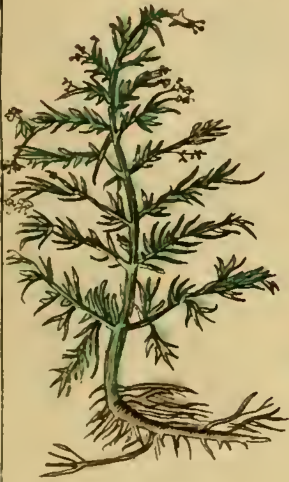
Male Piony.



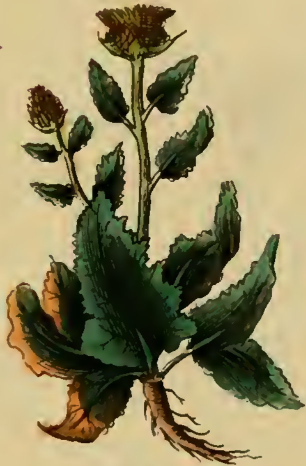
Roses.



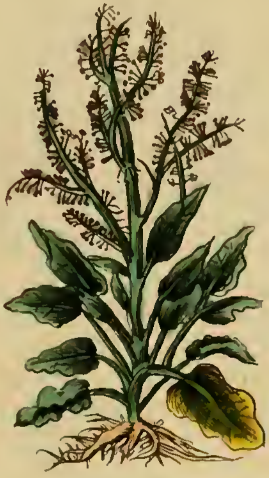
Rosa Solis.



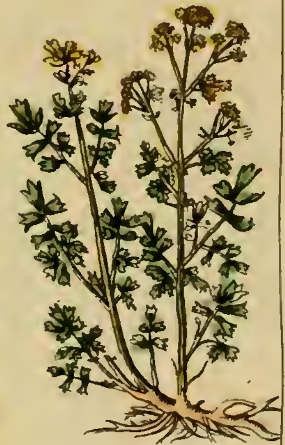
Rosemary.



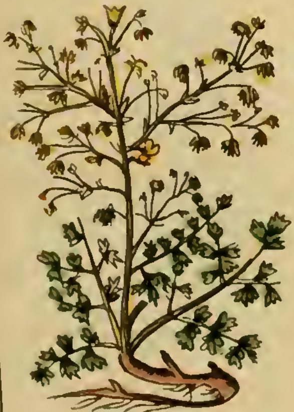
Rhubarb



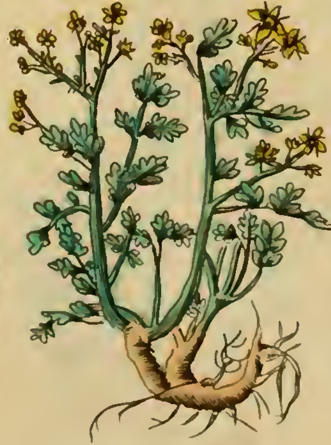
Monks Rhubarb.



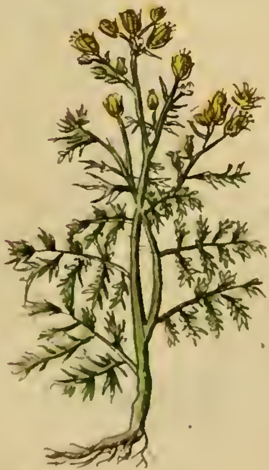
Bastard Rhubarb.



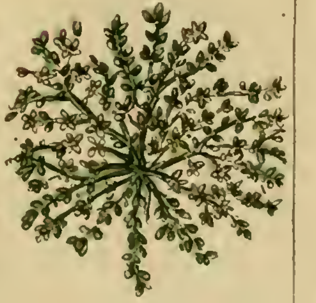
Small Bastard Rhubarb.



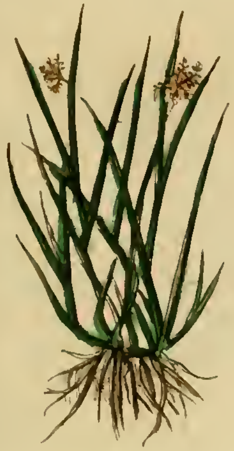
Garden Rue.



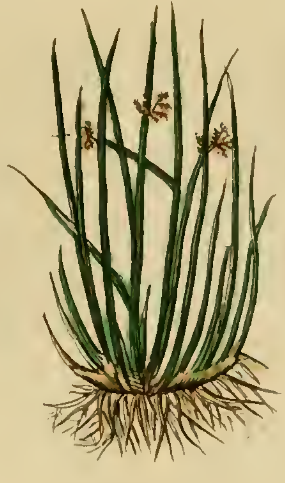
Meadow Rue.



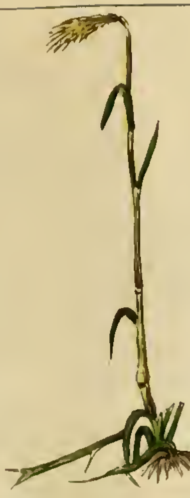
Rupture wort.



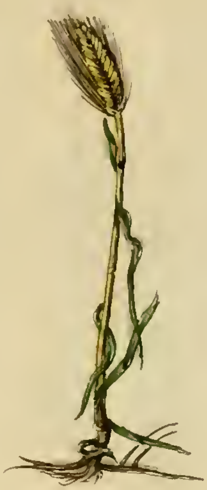
The Pithy Rush.



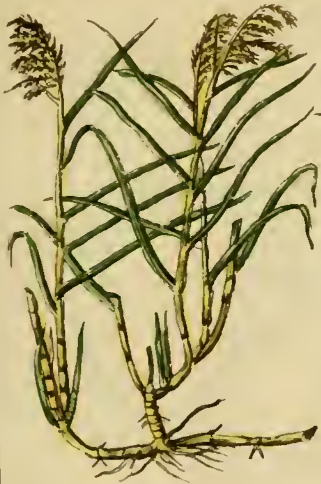
Common Rushes.



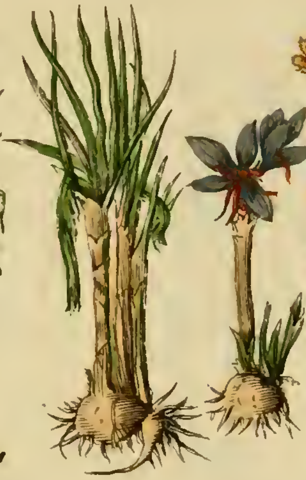
Rye.



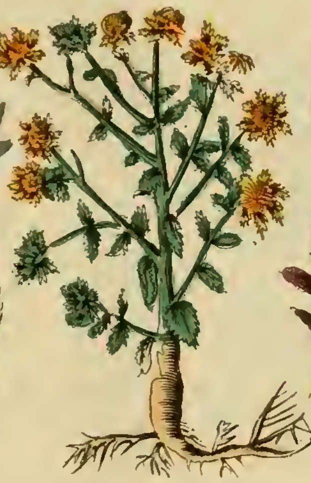
Rice.



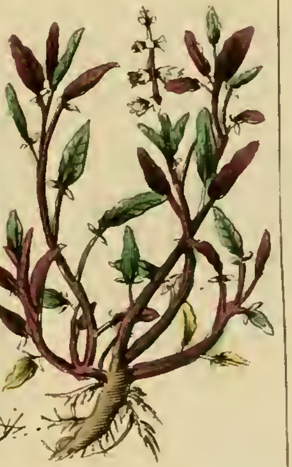
Aromatical Reed.



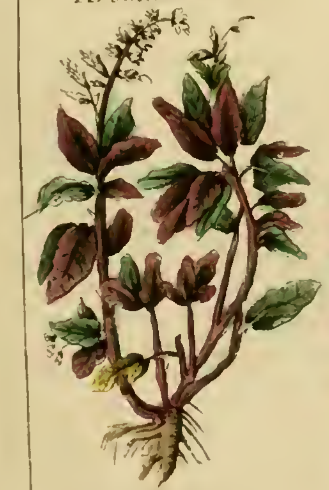
Saffron.



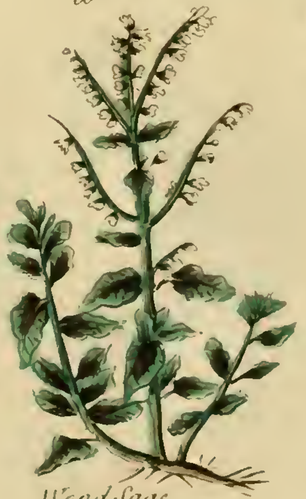
Bastard Saffron.



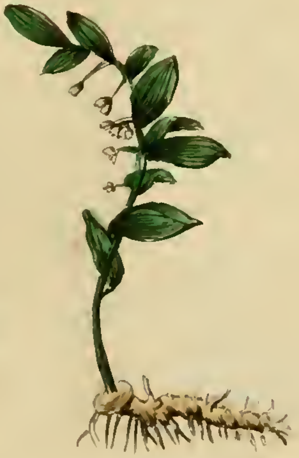
Small Sage.



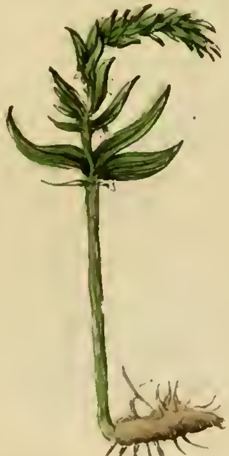
Broad Sage



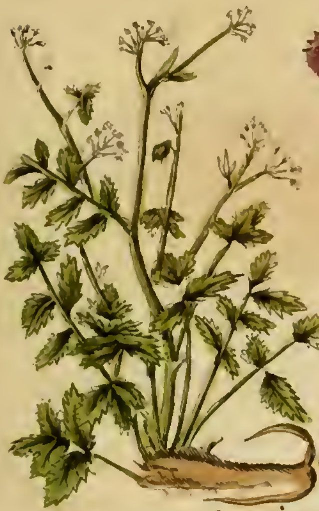
Wood Sage.



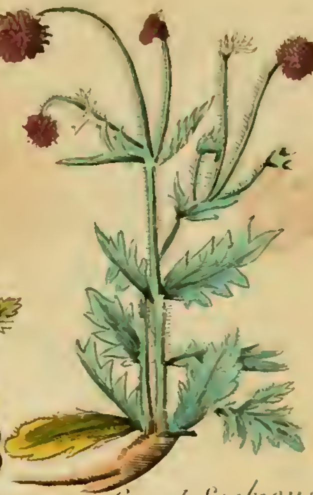
Great Solomons Seal



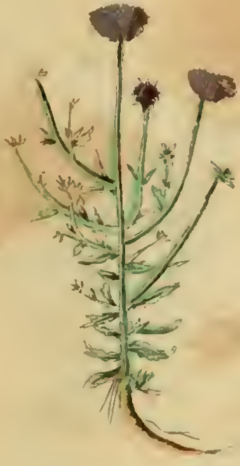
Small Solomonseal.



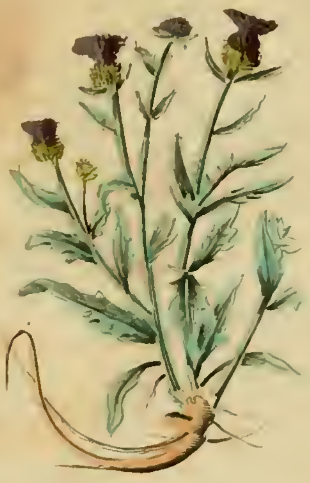
Burnet Saxifrage.



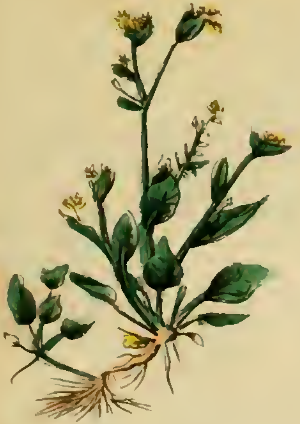
Great Scabious.



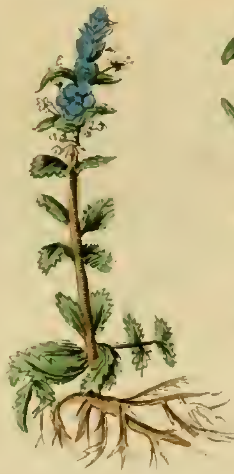
Sheeps Scabious.



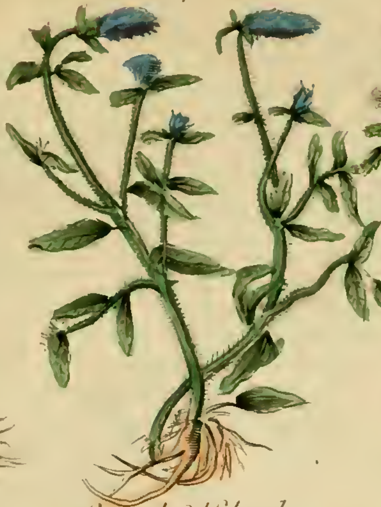
Third Scabious



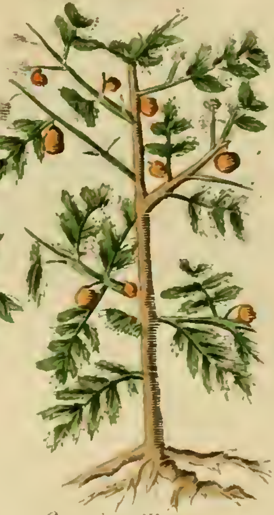
Scurvy Graſs



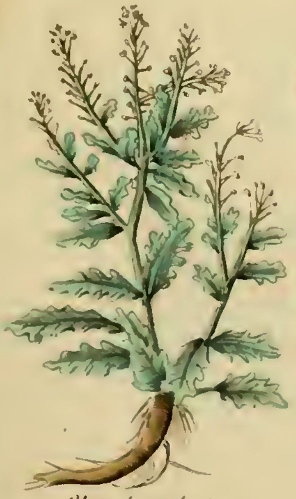
First Self heal



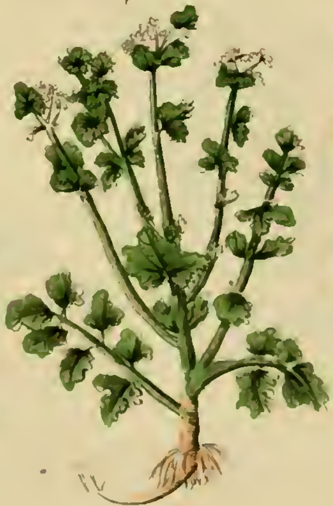
Second Self heal



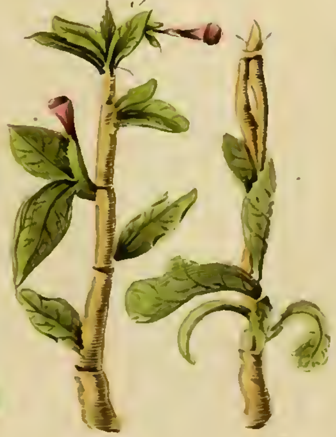
Service Tree.



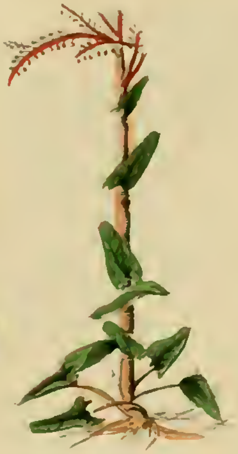
Shepherds purse.



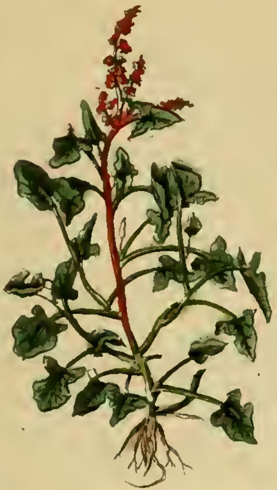
Smallage.



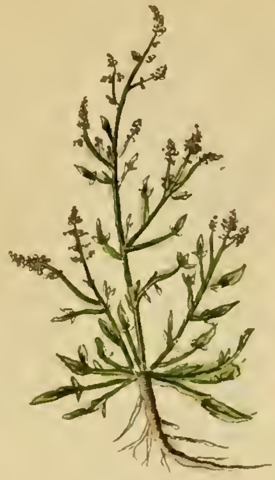
Soap wort



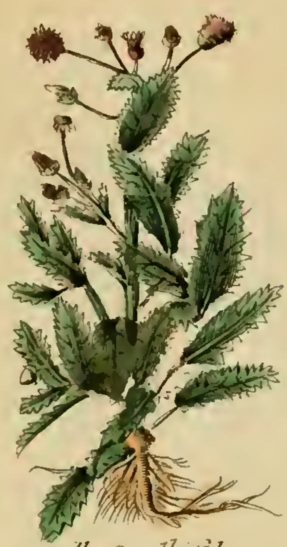
Sorrel.



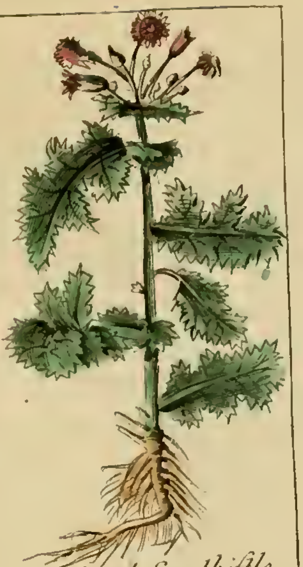
Roman Sorrel.



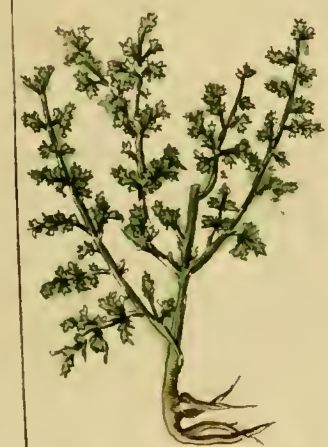
Wood Sorrel.



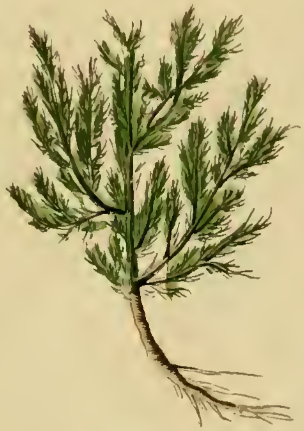
Milk Southiſtle.



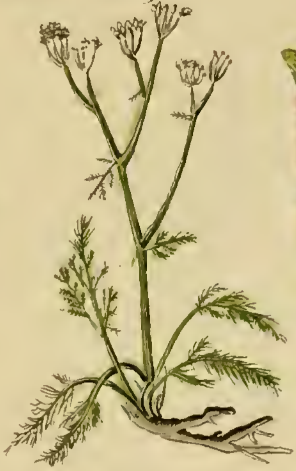
Sweet Southiſtle.



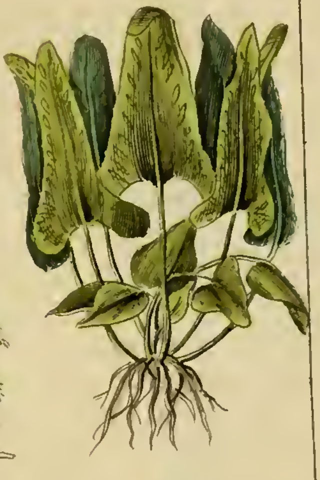
Great Southernwood.



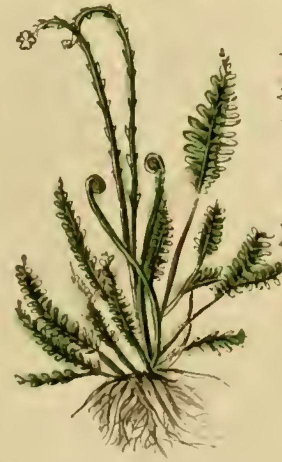
Small Southernwood.



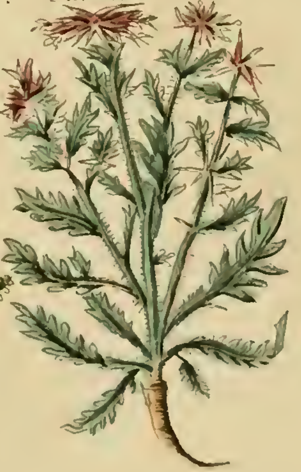
Spignel.



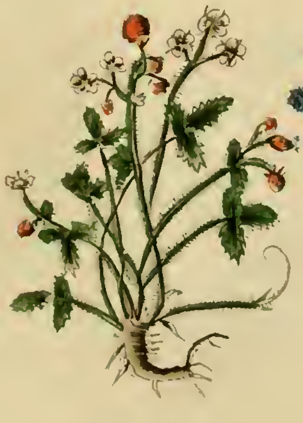
Large Spleenwort.



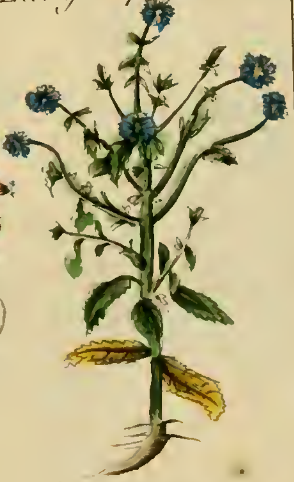
Small Spleenwort.



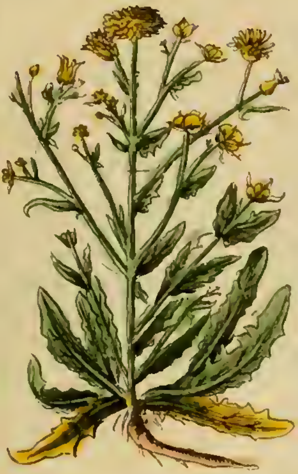
Star Thistle.



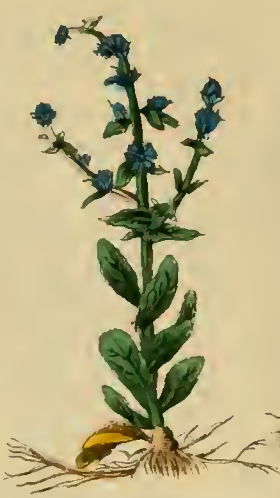
Strawberries.



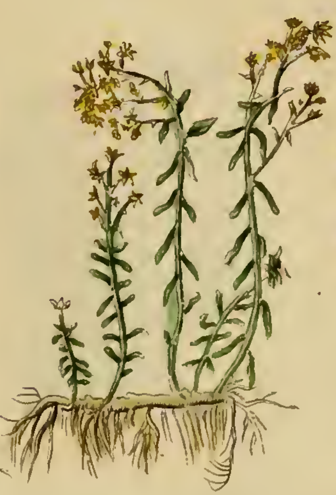
Succory.



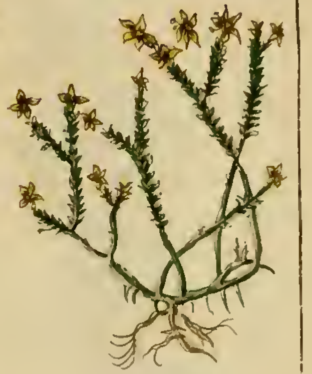
Yellow Succory.



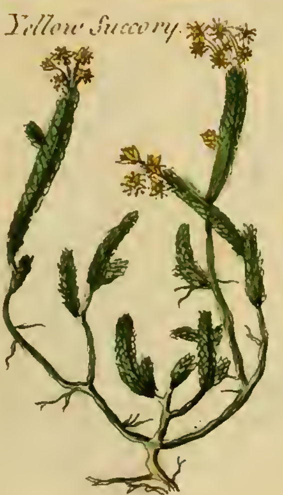
Garden Succory.



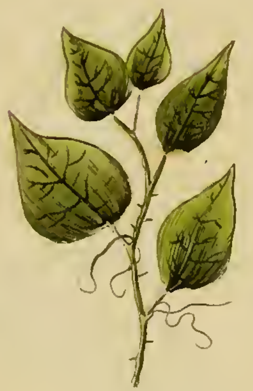
Great Stone crop.



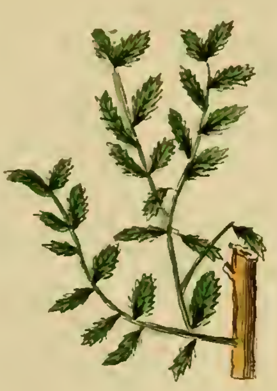
Wall Stone crop.



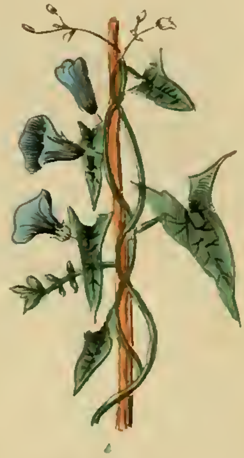
Yellow Stone crop.



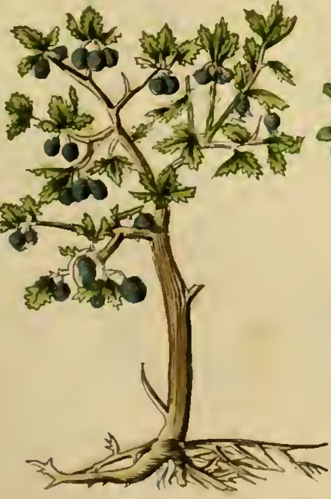
Sarsaparilla.



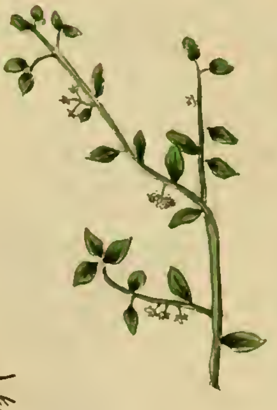
Sanders.



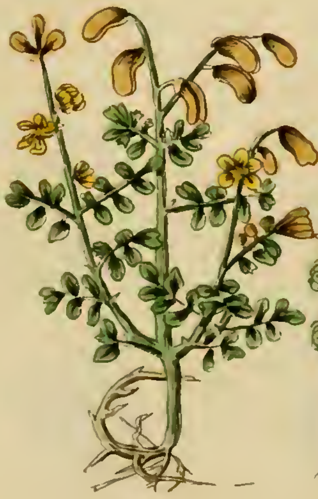
Scammony.



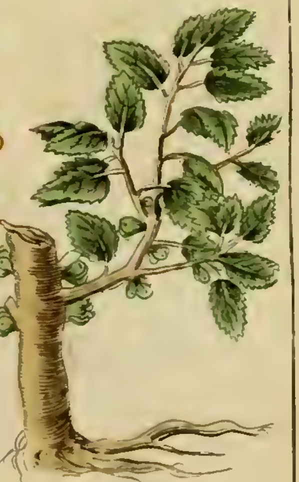
Sebestan.



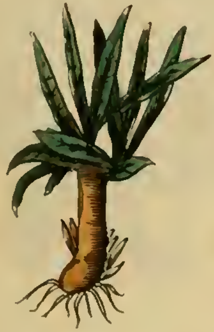
Wild Sebestan.



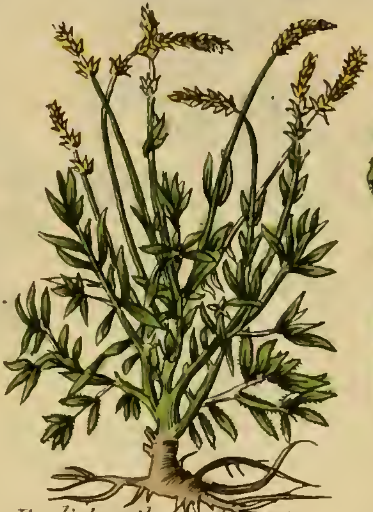
Sena.



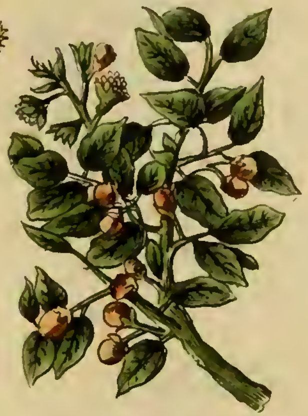
Sycamore Tree.



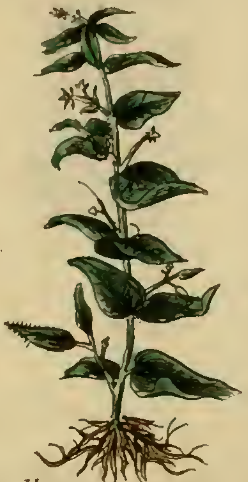
Spikenard.



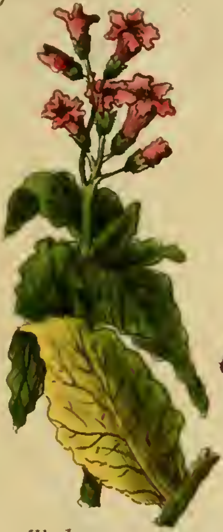
English Spikenard.



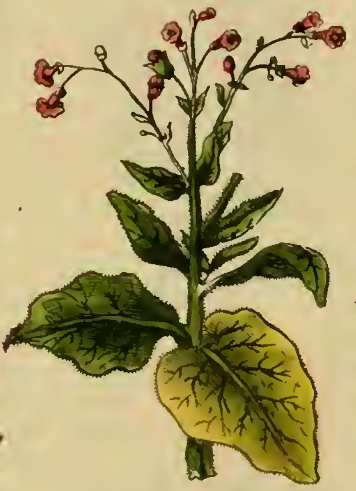
Storax Tree.



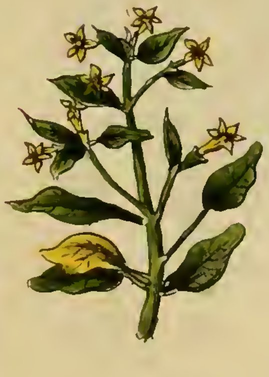
Swallow wort.



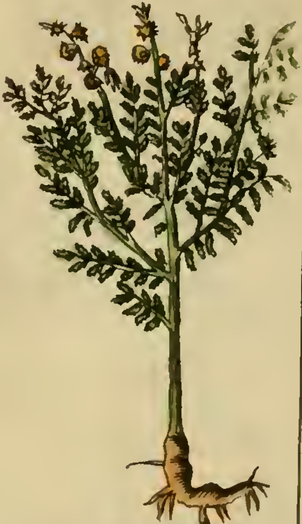
Tobacco.



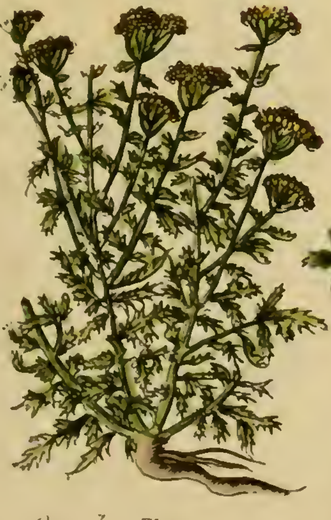
Short leav'd Tobacco.



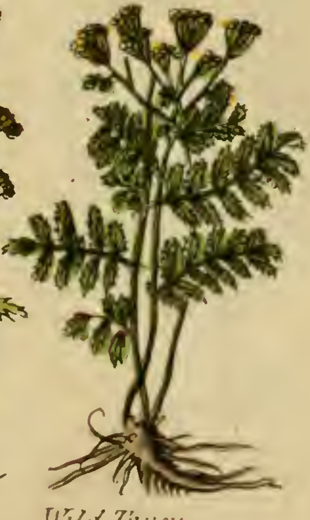
Small Tobacco.



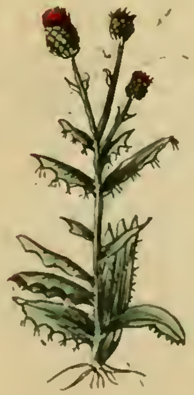
Tamerisk Tree.



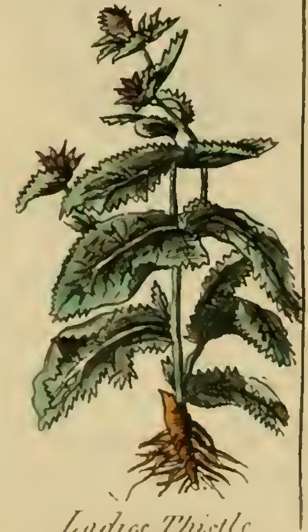
Garden Tansy.



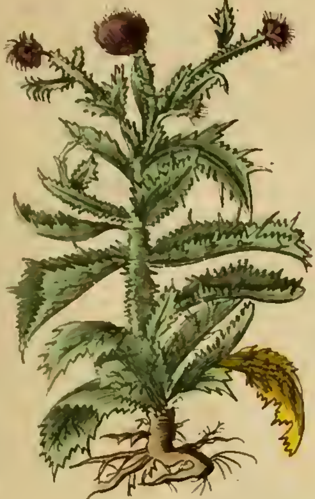
Wild Tansy.

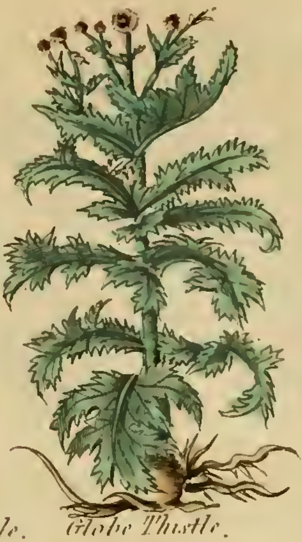


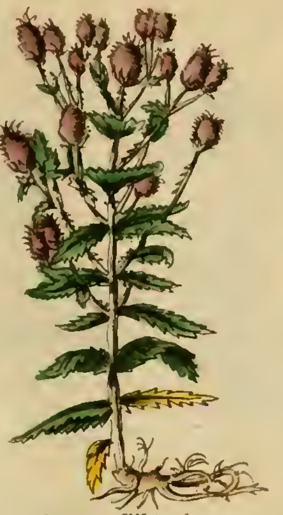
Melancholy Thistle.

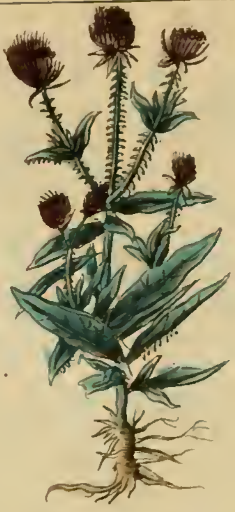


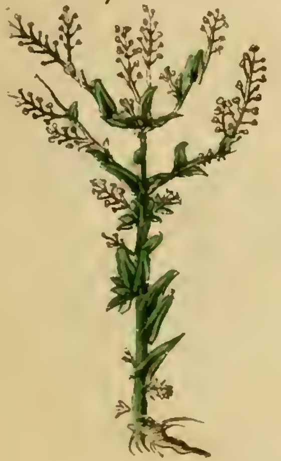
Ladies Thistle

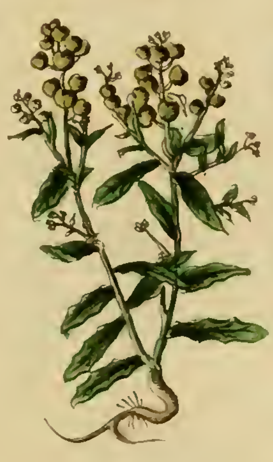

Woolly or Cotton Thistle.

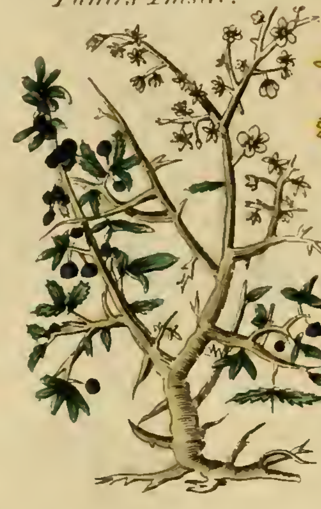

Globe Thistle.

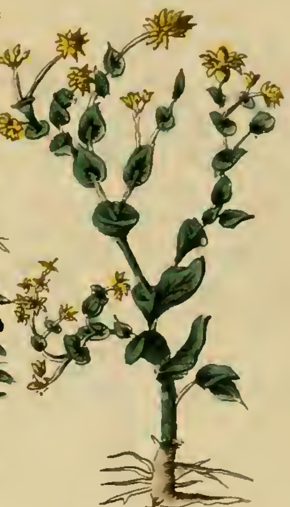

Fullers Thistle.

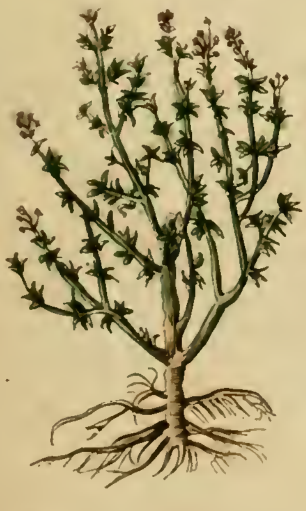

Wild Thistle.

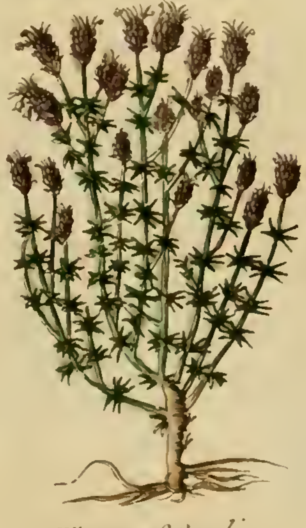

Treacle Mustard

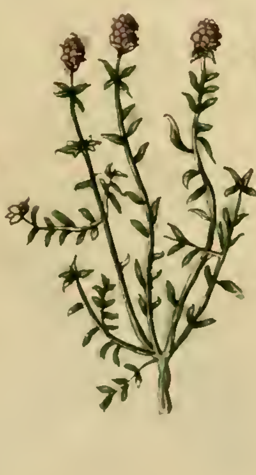

Mithridate Mustard.

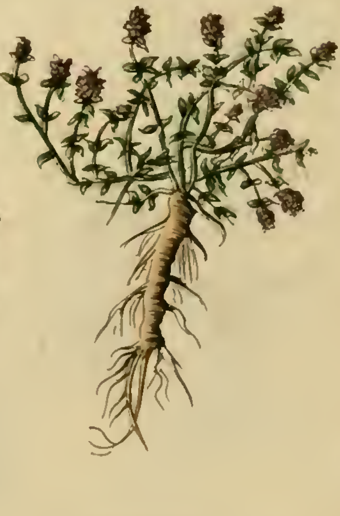

Black Thorn.

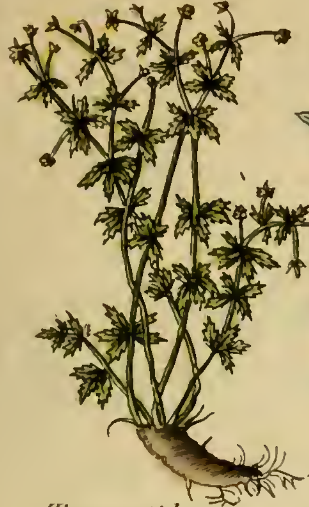

Thorough Wax.


Common Thyme.

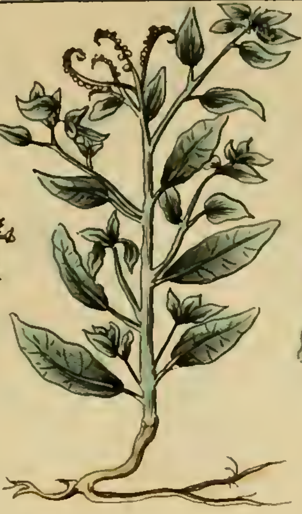

Thyme of Candia.


Mother Thyme.

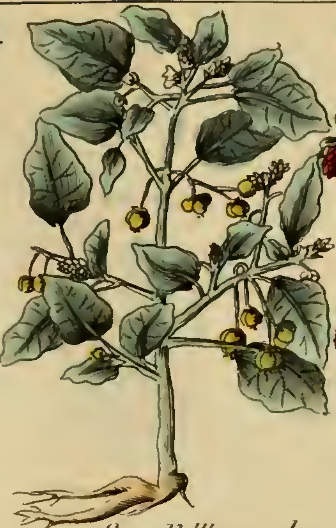

Wild Thyme.



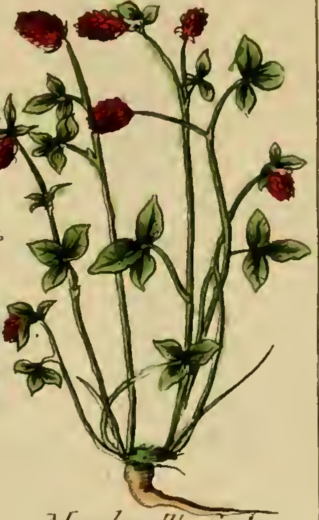
Tormentil.



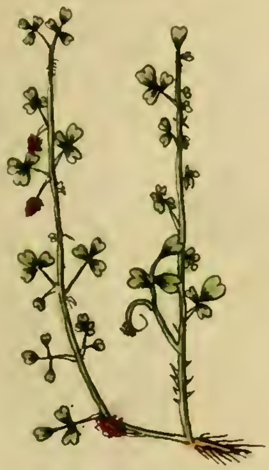
Great Turnsole.



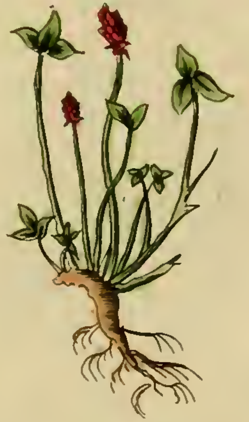
Small Turnsole.



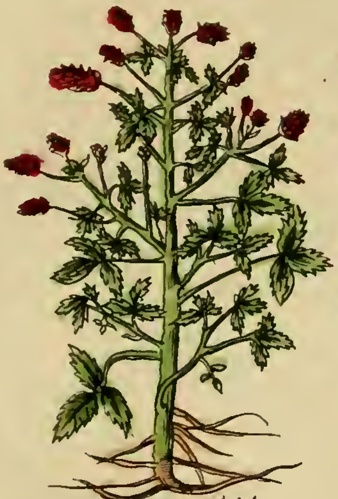
Meadow Trefoil.



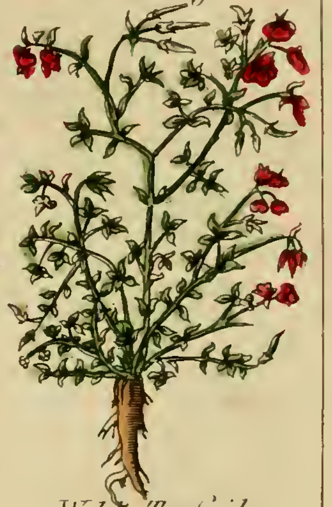
Heart Trefoil.



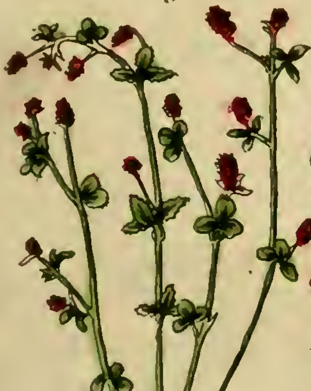
Pearl Trefoil



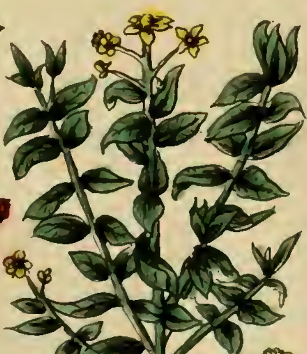
Sweet Trefoil



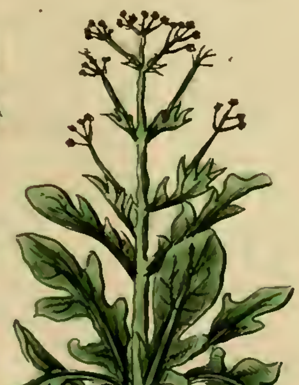
Wild Trefoil.



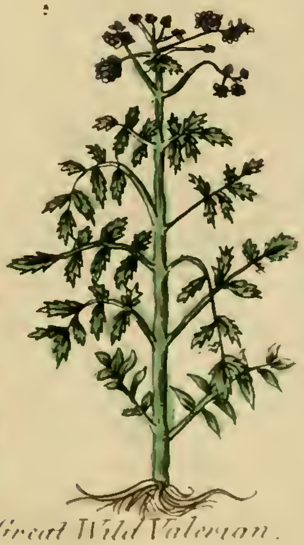
Stone Trefoil.



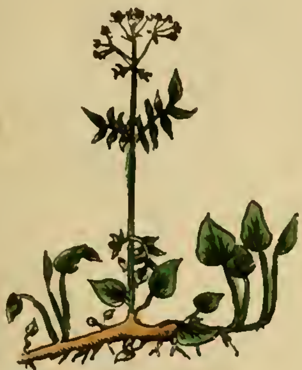
Tutsan or Park leaves



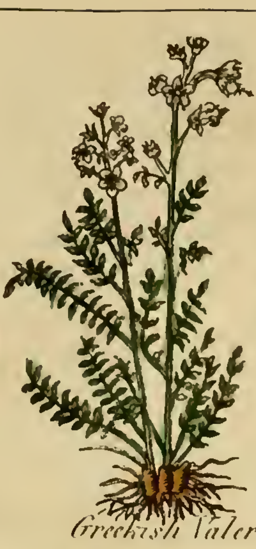
Garden Valerian



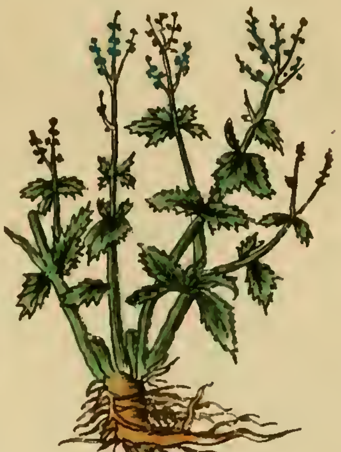
Great Wild Valerian.



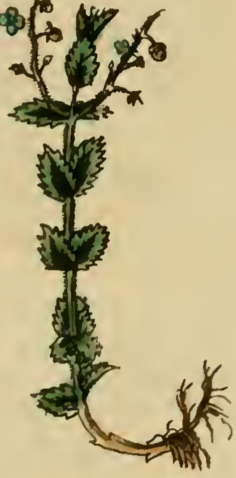
Small Wild Valerian.



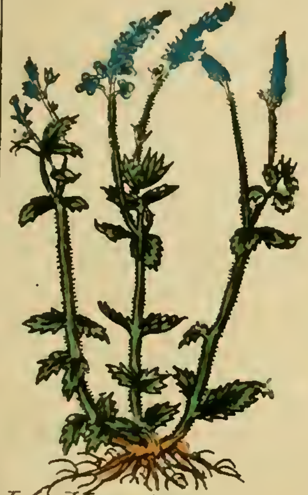
Greekish Valerian.



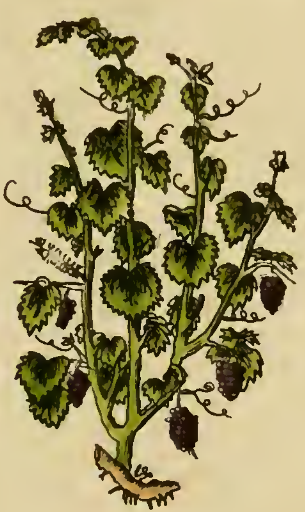
Upright Vervain.



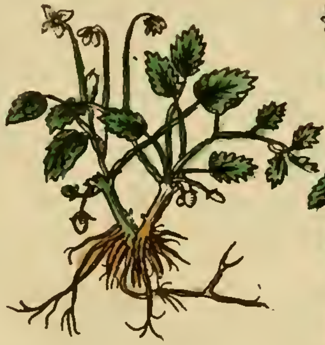
Flat Vervain.



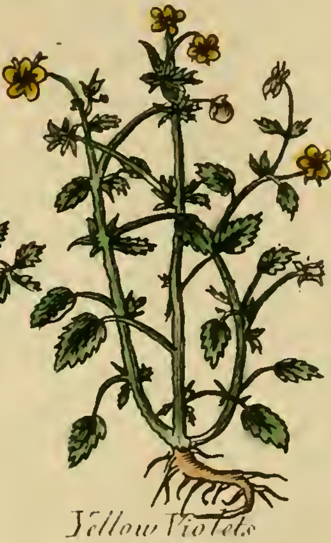
Low Vervain.



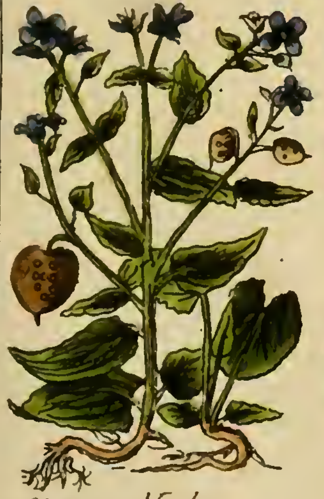
Vine.



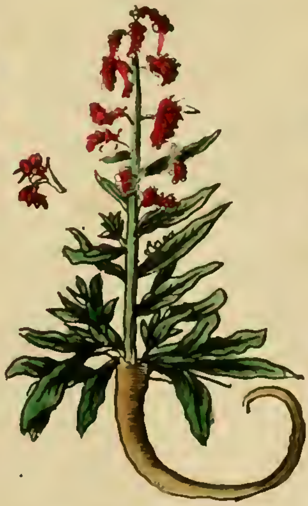
Purple Violets.



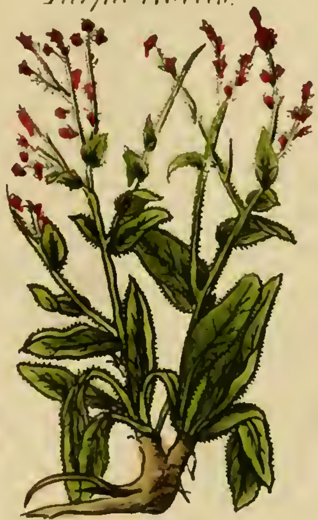
Yellow Violets



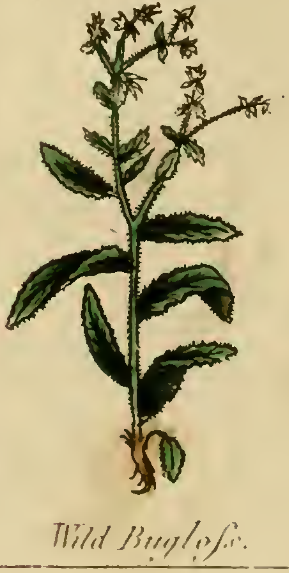
Strange Violets



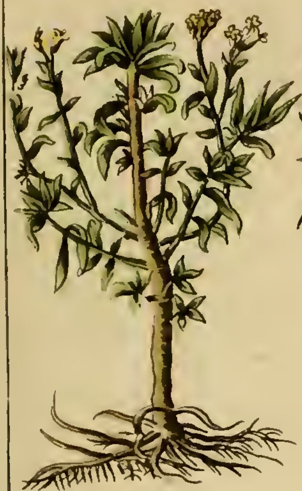
Vipers Bugloſse.



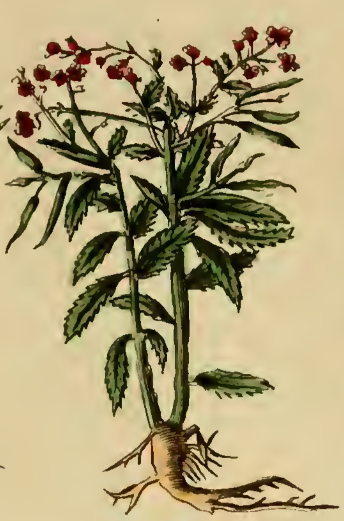
Garden Bugloſs.



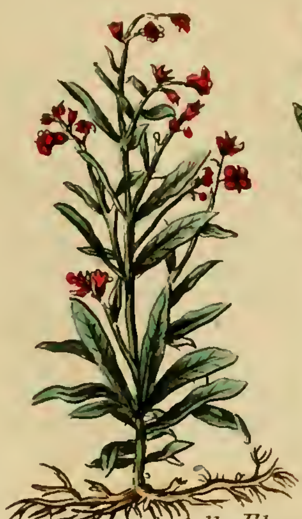
Wild Bugloſs.



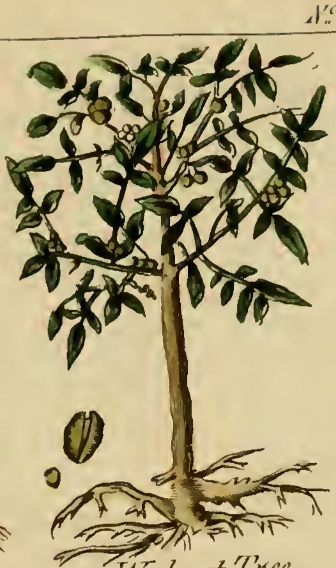
Wall Flower.



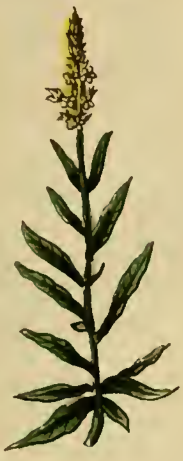
Winter Gilly Flower.



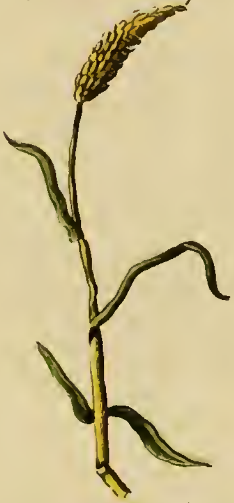
Stock Gilly Flower.



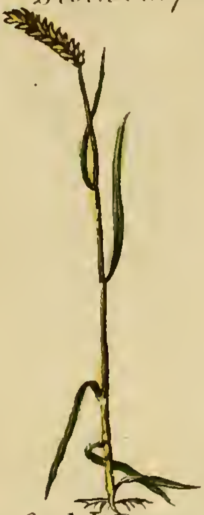
Walnut Tree.



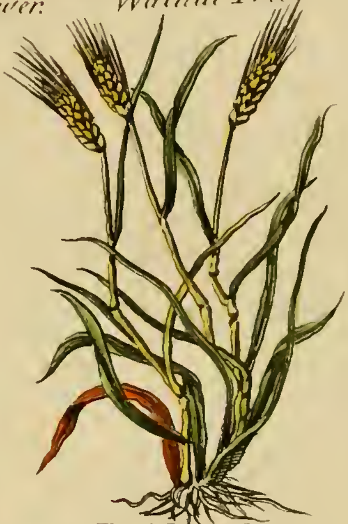
Wold, or Dyerſweed.



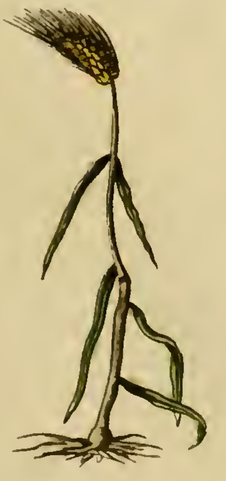
Common Wheat.



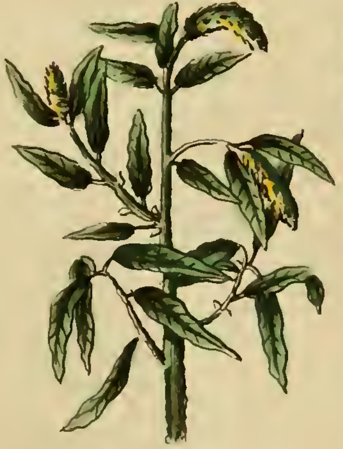
Spelt Wheat.



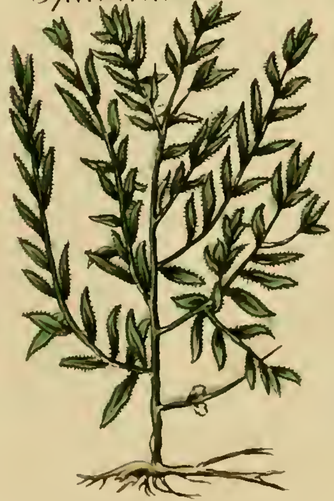
Typh Wheat.



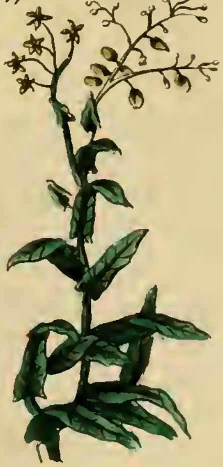
Roman Wheat.



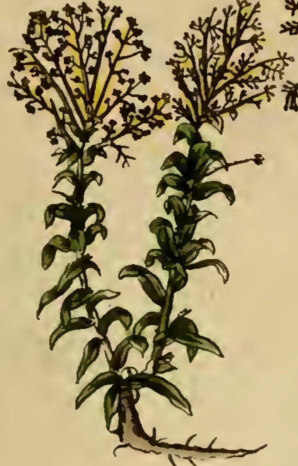
White Willow.



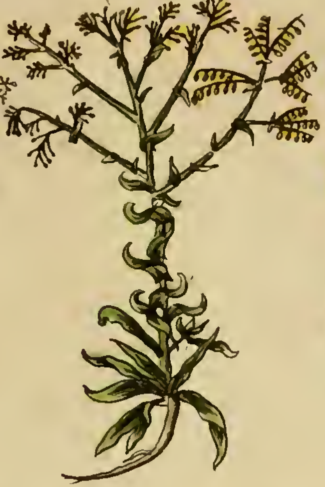
Common Willow.



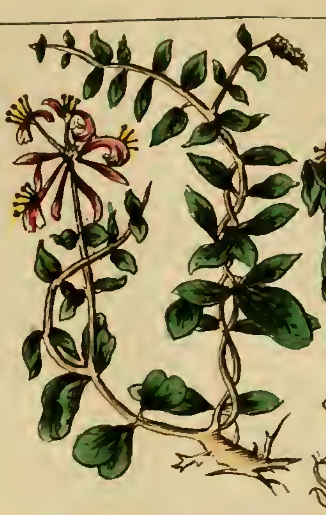
Woad.



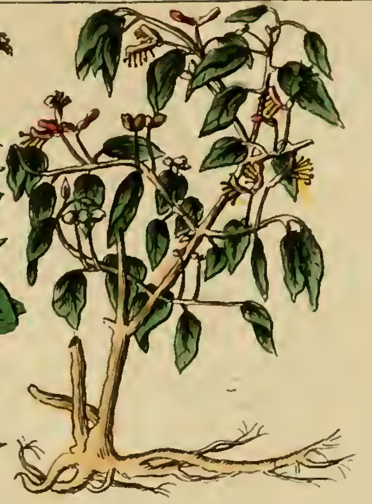
Garden Woad.



Wild Woad.



Honysuckle.



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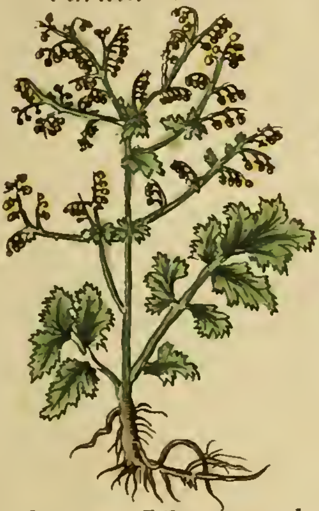

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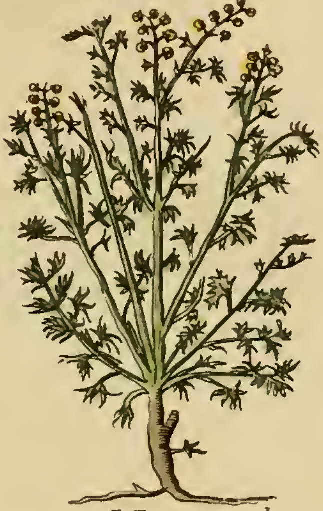

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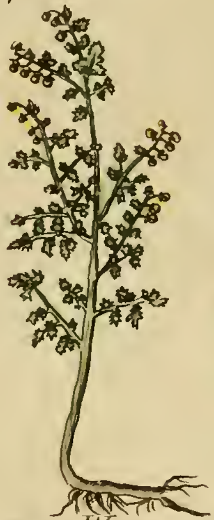

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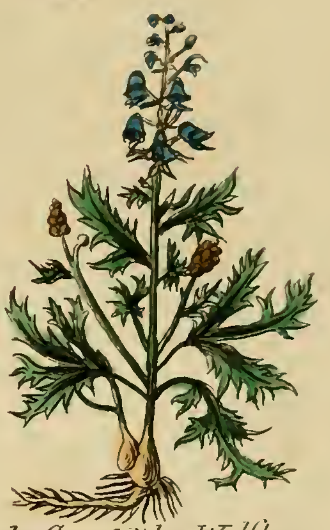

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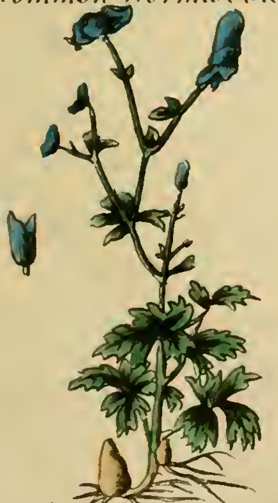

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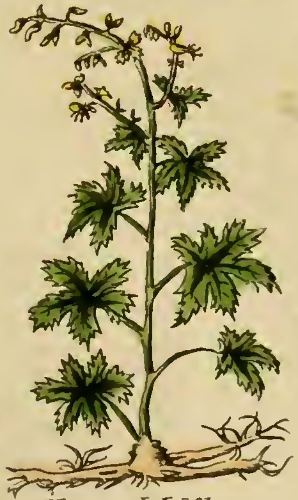

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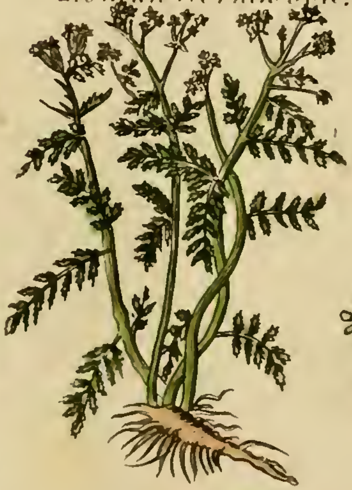

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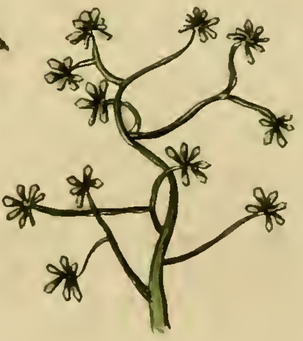

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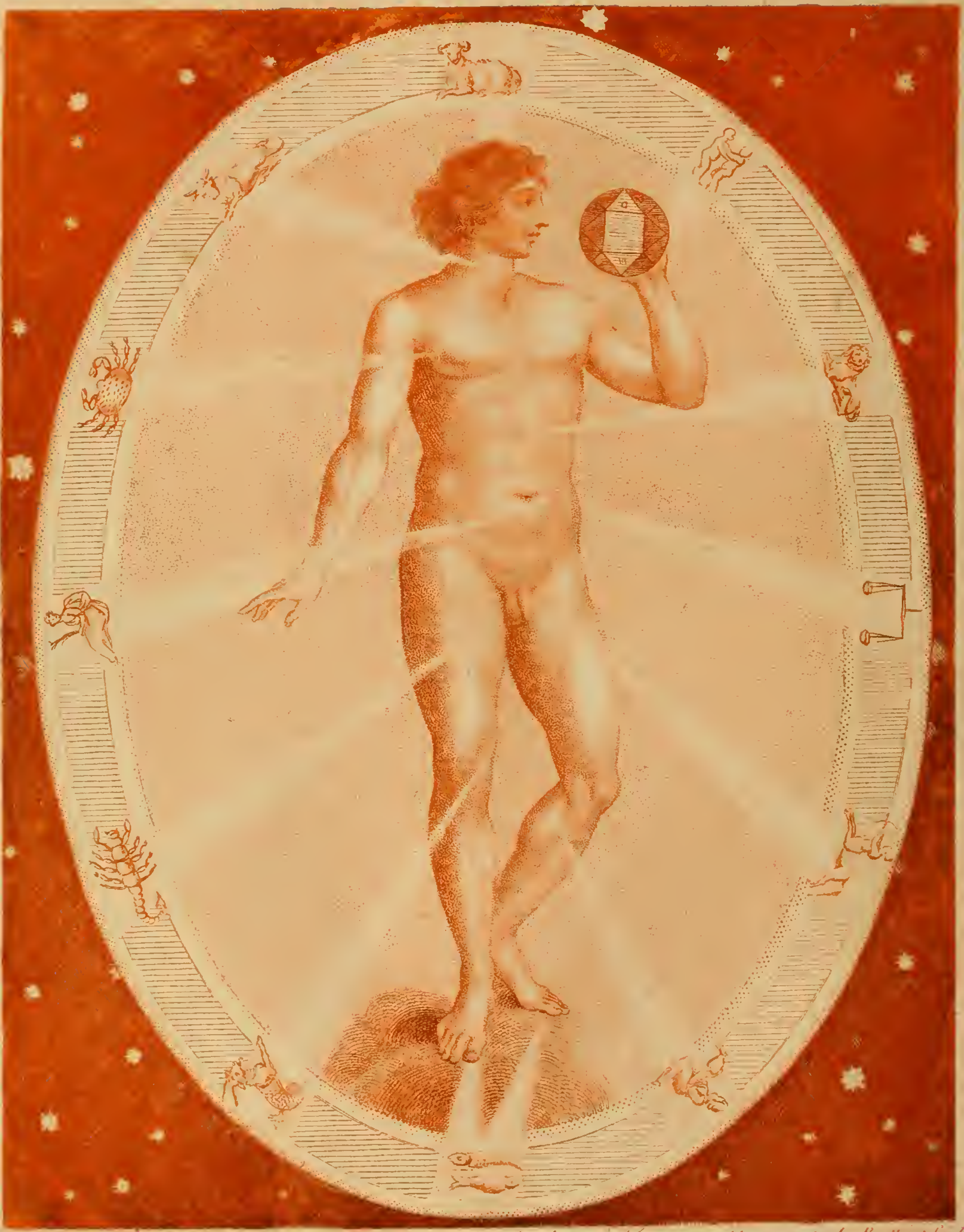


Dodd D.lin

View of the Celestial Influx on the Body of Man, as illustrated in Culpeper's Family Physician, and Sibley's Occult Sciences.

Prattent Sculp

# CULPEPER's ENGLISH PHYSICIAN,

## CONTAINING THE

# MEDICAL PART.

## A PHYSICAL AND ASTRONOMICAL DESCRIPTION OF MAN.

GOD, the omnipotent and wiſe Creator, having made all things out of nothing, and from a crude and undigeſted maſs, according to his will, and by his word, brought all things into a decent frame and majeſtic ſtructure: out of a confuſed chaos made the heavens and the earth; out of that which was dark and void he created light, he ſeparated the waters from the earth, and gave bounds to the unruly waves; and indued the dry and barren earth with prolific virtue, richly adorning it with graſs, herbs, and fruit-trees; he made the ſun, moon, and ſtars, to divide the light from the darkneſs, to enlighten and rule both day and night, to be for ſigns, and to diſtinguiſh ſeaſons, days, and years; by his word he created every living thing that moveth.

Having thus far proceeded in his ſo excellent and admirable workmanſhip of creation, he made MAN a ſummary of the world's fabric, a ſmall draught of the divine nature: he was made after all other creatures, not only as the moſt perfect, but as the ſuperintendant and maſter, of all things: created *Qod dominetur in piſcis maris, et in volucres cœli, et in pecudes, et in univerſam terram, atque in omnia reptilia reptantia ſuper terram:* "To rule over the fiſh in the ſea, and over the fowls of the air, and over cattle, and over the earth, and over every thing."

In man he ended his work; on man he ſtamped his ſeal and ſign of his power, on him he has imprinted his own image and ſuperſcription, his arms and his portraiture. *Dixit Deus, faciamus hominum ad imaginem noſtram, ſecundum ſimilitudinem noſtram:* "God ſaid, let us make man in our image, after our likeneſs." In the creation of man, God ſeemed to deliberate and take council with himſelf, how to epitomize and gather together all his works in ſo ſmall a compaſs, to contract his book of creation into ſo ſmall a volume. Hence he is called the microcoſm, or little world, the recapitulation of all things, the ligament of angels and beaſts, heavenly and earthly, ſpiritual and corporeal, the perfection of the whole work, the honour and miracle of nature. He created him naked, being a pure, neat, and delicate, creature, made up of thin, ſubtle, well tempered and ſeaſoned, humours, innocent and far more beautiful than the reſt.

He was created upright, but little touching the earth, quite oppoſite to the vegetable plant, whoſe root is therein fixed; far different alſo from the beaſt, who is a mean between a plant and himſelf, and goeth downward, his two extremes tending to the bounds of the horizon: this upright gait belonging only unto the human ſpecies, as the holieſt and moſt divine creature, his head tending to the heavens, on which he looks, and contemplates with grateful adoration the omnipotence of his Creator.

His body being thus formed of pure ſubtile earth, as a houſe and habitation for the ſoul, God breathed into him the breath of life, and he became a living creature; ſo, in the ordinary generation and formation, which is made of the ſeed in the womb, nature obſerveth the ſelf-ſame order: the body is firſt formed, as well by the elementary force, which is in the ſeed and the heat of the matrix, as by the celeſtial influence of the ſun; according to the adage, *Sol et homo generant hominem*. "The ſun and man do engender man;" which is done, according to the opinion of the moſt eminent naturaliſts and phyſicians, in ſuch order that the firſt ſeven days the ſeed of the man and the ova of the woman mingle and curdle like cream, which is the beginning of conception; the ſecond ſeven days, the ſeed is changed into a formleſs bloody ſubſtance, and concocted into a thick and undigeſted maſs of fleſh, the proper matter of the child; the next ſeven days, from this maſs is produced and faſhioned a groſs body, with the three moſt noble parts, viz. the liver, heart, and brain; the fourth ſeven days, or near thirty, the whole body is perfected, jointed, and organized, and is fit to entertain the ſoul, which inveſts itſelf into the body (according to the beſt authority) about the ſeven-and-thirtieth or fortieth day: at the third month, or thereabout, the infant has motion and ſenſe; and at the ninth month is brought forth. Theſe times cannot be ſo exactly prefixed, but that by the ſtrength or debility of the ſeed or matrix they may be either haſtened or prolonged. But I ſhall not enter minutely upon this ſubject now, but give a more particular deſcription of it hereafter.

The body of man conſiſts of a number of bones and cartilages, which are the baſis and upholding pillars of the whole fabric; the joints are compacted with many ligaments, and are covered with innumerable membranes; the members are ſupplied with above thirty pair of ſenſitive nerves, as with little cords; and all filled with as many arteries, like water-pipes, conveying vital ſpirits to all parts; the empty places are filled up with above four hundred muſcles of different ſorts, all covered with a ſkin.

Man, for whom all things were made, is nouriſhed by the balſamic ſpirits of vegetables, and therefore doth conſiſt of all theſe faculties, that ſpring up as a token of health or ſickneſs. The celeſtial planets have alſo great influence over him; the moiſtening power of the Moon is repreſented by the marrow which flows from the brain; in the genital part is Venus ſeated; eloquence and comelineſs are the effects of nimble-witted Mercury; the Sun hath a near affinity to the heart; benevolent Jupiter hath his ſeat in the liver, the fountain of nutritive blood; the fiery fury of Mars is lodged in the gall; the ſpungy and hollow melt, the ſeat and receptacle of melancholic humours, is a perfect repreſentation of the cold planet Saturn. Indeed, the ſpirits of the body do manifeſt and hold forth the quinteſſence of all things. The four humours in man anſwer to the four elements: as the bile, which is hot and dry, repreſenteth the fire; hot and moiſt blood, the air; phlegm, cold and moiſt, the water; cold and dry melancholy, the earth. Man is an admirable creature, the univerſe and epitome of the world, and the horizon of corporeal and incorporeal things. I ſhall conclude this part with the ſaying of Zoryaſtes: " O man! the workmanſhip of moſt powerful nature, for it is the moſt artificial maſter-piece of God's hands!"

## A DESCRIPTION OF THE HEAD.

THE head of man poſſeſſes the higheſt place in the body, and repreſents the uppermoſt and angelical region: it is the fort of man's mind, the ſeat of reaſon, the habitation of wiſdom, the place of memory, judgment, and cogitation; it containeth the brain, cold and ſpungious by nature, incloſed with two ſkins, the one, more hard and thick, joining itſelf to the *dura mater*; the other more thin and eaſy, wherein lieth the brain incloſed, called *pia mater*; it is ſoft and tender to the brain, and nouriſheth it, as a loving mother doth her young and tender babe; from the *pia mater* iſſue the ſinews and marrow that deſcendeth and falleth down through the *vertebræ* of the back to the reins. In the brain is the ſeat and throne of the rational ſoul, in which are a very great number of veins and arteries running through all the ſubſtance thereof, adminiſtering to the brain both ſpirit and life, vital and nutrimental nouriſhment, which comes from the heart and liver by very minute or ſmall veins and arteries; and concocted and re-concocted, elaborated, and made very ſubtile, paſſing through thoſe woven and interlaced, turning and winding, in which labyrinth the vital ſpirit, often paſſing and re-paſſing, is perfected and refined, and becomes animal.

The *pia mater* divides the ſubſtance of the brain into three certain cells and diviſions, the foremoſt part of which contains the moſt, the middle part leſs, and the hindmoſt part the leaſt. In the foremoſt part of the brain *imagination* is ſeated; in the middle, *judgment*; in the hindmoſt part, *memory*; imagination is hot and dry in quality, quick and active, from whence it cometh that frantic men, and ſuch as are ſick, of hot maladies, are excellent in that which belongs to imagination; many, upon ſuch a diſtemper, have been excellent in poetry and divination; it never ſleepeth, but is always working, whether the man be ſleeping or waking; and, by the vapours that ariſe from the heart, form variety of cogitations, which, wanting the regulation of judgment, *when man ſleepeth*, becomes a dream.

Hence it appears that ſubtilty, promptitude, and that which they commonly call *wit*, belongeth to a hot imagination: it is active, ſtirring, undertaketh all, and ſets all the reſt to work; it gathers the kinds of figures of things, both preſent, by the uſe of the five ſenſes, and abſent, by the common ſenſe.

Judgment is ſeated in the midſt of the brain, there to bear rule over the other faculties, it is the ſeat of the rational ſoul, and the judge of men's actions: if you would know the mean whereby it knoweth and judgeth of things, ſome authors have been of opinion, that the ſpirit knoweth by the help of the ſenſes, and that the underſtanding without the ſenſes is but as white paper. *Nil eſt in intellectu, quod non fuerit prius in ſenſu:* "There is nothing in the underſtanding which was not firſt in ſenſe." But this opinion is falſe, becauſe the ſeeds of ſcience and virtue are inſinuated into our ſpirits, elſe is the ſtate of the reaſonable ſoul worſe than the vegetative or ſenſitive, which of themſelves are able to exerciſe their functions. It were abſurd to think that ſo noble and divine a faculty ſhould beg aſſiſtance of ſo vile and corruptible a one as the ſenſes, which apprehend only the ſimple accidents, not the natures or eſſence, of things: and, were it ſo, it muſt follow, that they who have their ſenſes moſt perfect ſhould be moſt witty, whereas we ſee many times the contrary. Yet let no one think that the ſpirit hath no ſervice from the ſenſes; for, in the beginning or diſcovery and invention of things, the ſenſes do much ſervice to the ſpirit, but the ſpirit dependeth not upon the ſenſes. Some are of opinion, that it is hot and moiſt in quality; others ſay, that a dry temperature is proper to the underſtanding, whereby it comes to paſs that aged perſons excel thoſe in underſtanding that are young, becauſe, as years increaſe, moiſture doth decreaſe in the brain; hence it followeth, that melancholy perſons, that are afflicted with want, and faſt much, are wiſe and ingenious, for heavineſs and faſting are great driers: *Splendor ſiccus, animus ſapientiſſimus, vexatio dat intellectum*; "Heat and draught refine the wit, affliction giveth underſtanding;" and that is the reaſon that great perſons, who feed high, and take little or no care, that have nothing to vex them, are for the moſt part not very wiſe.

Beaſts that are of a dry temperature, as ants, bees, elephants, &c. are cunning and ingenious; on the contrary, they that are of a moiſt conſtitution are ſtupid and without ſpirit. Memory is ſeated in the hinder cell of the brain, as the grand accountant or regiſter; ſome ſay its temperature is cold and dry, and that is thought to be the reaſon why melancholic people have good memories; others are of opinion that it is moiſt, becauſe children have better memories than old men: men are more apt for memory in the morning, by reaſon of the moiſture gained by ſleep in the night; but, let it be as it may, it is moſt certain that thoſe who have a good memory are not in general very wiſe.

It is true, that many have been excellent in this faculty. Seneca repeated two thouſand names as they were firſt ſpoken; he alſo, hearing two hundred verſes, rehearſed them, and began at the laſt. Cyrus and Scipio knew every ſoldier's name in their armies. Mithridates learned the languages of two-and-twenty nations. Eſdras the prieſt had the whole Jewiſh doctrine by heart. Julius Cæſar would dictate to four at the ſame time; and, that which is more ſtrange, Pliny would dictate to one, hear another, and read at the ſame inſtant. As theſe were ſo excellent and acute in memory, others were as dull: Atticus could never learn the letters of the alphabet by heart; others could not count above four. It is ſaid, that Theodore Beza, two years before he died, as he languiſhed, his mind grew ſo feeble that he forgot things preſent, yet he held thoſe things which were printed in his mind before-time, when his underſtanding and memory were good. What ſhall we ſay of Meſſalla Cornivus, who forgot his own name? or Franciſcus Barbarus, of Athens, a very learned man in the Greek tongue, who having received a blow on the head with a ſtone, forgot his learning, which he had ſpent the greateſt part of his life-time upon, yet remembered all things elſe? Theſe things are brought to paſs either by the ſtrength or debility of men's genitures, and from directions and accidents thence proceeding. Wit and underſtanding, and all the faculties of the ſoul, depend on a certain temperament; and hence it comes to paſs that thoſe who are acute and wiſe in ſome things are ſtupid and dull in others.

## OF THE INTERIOR PARTS OF THE HEAD.

The ſenſitive faculty has its reſidence in the *pia mater*; it is that which gives virtue to all the particular ſenſes, and keeps a harmony amongſt them: they are five in number, viz. ſeeing, hearing, ſmelling, taſting, and feeling; although theſe are all united in one in the brain, yet operatively they are diſtinguiſhed in their ſeveral ſeats and places of reſidence.

The SIGHT reſides in the eyes, and particularly in the chryſtalline humour; they are two in number, and collateral, planted in the higheſt ſtage, as centinels; they are the luminaries of the microcoſm; Galen ſays, the brain and head were made for the eye, that they might be in the higheſt, as a beholder in a tower; they are next in nature unto the ſoul; for in the eye is ſeen and known the diſturbances and griefs, gladneſs and joys, of the ſoul, as love, wrath, and other paſſions; they are compounded and made of ſeven tunicles, or coats, and three humours; they proceed out of the ſubſtance, they take a panicle to defend it from annoyance. They meet and are united into one ſinew about half an inch in length before they enter the ſkull, and after divided into two, each goeth into one eye; they are called *nervi optici*, the optic nerves, and through theſe are brought the viſible ſpirits to the eye.

Theſe are the moſt noble outward parts of the body, in beauty, utility, mobility, and activity. They are to the viſage that which the viſage is to the body; they are the face of the face; and, becauſe they are tender, delicate, and precious, they are fenced on all ſides with ſkins, lids, brows, and hair. The object of the eye or ſight is colour (according to the common opinion), which is an adherent quality in bodies, whereof there are ſix ſimples, as white, yellow, red, purple, green, and blue: the compounds are infinite; to ſpeak more fully, the true object is light, which is never without colour, and without which the colours are inviſible.

The ſenſe of ſeeing excelleth all the reſt in many things; it apprehendeth farther off, and extendeth itſelf even to the ſtars. It is certainly reported, that Strabo had ſuch acute eyes, that from Lilibæum he could diſcern ſhips going forth of the Carthaginian haven, and could number them; the diſtance was one hundred and thirty-five miles. It hath more variety of objects; for to all things, and generally in all, there is a light and colour, the objects of the eyes, as I hinted before. It is moſt exquiſite, for it is moſt exact, in the leaſt and fineſt thing that preſents itſelf. It is more prompt and ſudden; for it apprehendeth even in a moment, and without motion, when the other ſenſes require motion and time. It enjoyeth a liberty incomparable to others; the eye ſeeth, or ſeeth not, and therefore hath lids to open or ſhut: it is active; all the reſt purely paſſive. But that which is moſt noble in this ſenſe is, that the privation of the object thereof, which is darkneſs, brings fear, and that naturally, becauſe then a man findeth himſelf robbed of ſo excellent a guide; the ſight in the light is inſtead of company, wherein man much delighteth.

Hearing is the next ſenſe to be conſidered, whoſe reſidence is in the ears; it is in quality cold and dry, under the dominion of Saturn. They are placed on the outſide of the head, in the ſelf-ſame height as the eyes are, as the ſcouts of the body, porters of the ſpirit, the receivers and judges of the ſounds, which always aſcend. They have their entrance oblique and crooked, that ſo the ſound may not enter all at once, whereby the ſenſe of hearing might be hindered, and not ſo well able to judge; and again, that the ſounds, being fugitive, might there lurk, and abide under his ſhadow, till the inſtruments of hearing have gotten poſſeſſion thereof. The ſinews, that are the organs of hearing, ſpring each from the brain, and, when they come to the hole of the ear, they are wreathed together; the end is like a worm, or little teat, into which is received the ſound, and from thence carried to the common wits, to diſtinguiſh. The object of the ear, or hearing, is a ſound or noiſe proceeding from the encounter of two bodies; a pleaſant and melodious ſound ſweeteneth and appeaſeth the ſpirit, conſequently the body too, and drives maladies from them both; the ſharp and penetrant doth trouble and wound the ſpirit. This ſenſe hath many ſingularities; for the ſervice of the body, the ſight is moſt neceſſary, but, for the ſpirit, hearing hath the ſuperiority; it is ſpiritual, the agent of underſtanding; many that have been blind have been great and wiſe philoſophers, but never any that were deaf. In brief, ſcience, truth, and virtue, have no entrance into the ſoul but by the ear. Chriſtianity teaches, that faith cometh by hearing, which the ſight doth rather hurt than help. Faith is the belief of thoſe things which are not ſeen, which belief is acquired by hearing. For all theſe reaſons, and many more that might be inſerted, the wiſeſt have ſo much commended hearing, the pure guardian from all corruption, the health of the inward man.

Smelling is ſeated in the noſe, governed by Mars, and is hot and dry in quality; and therefore martial creatures, or ſuch as are hot and dry of conſtitution, excel in this faculty, as dogs, &c. From the brain cometh two ſinews to the holes of the brain-pan, where beginneth the concavity of the noſe, and theſe two are the proper organs or inſtruments of ſmelling; they have heads like paps, into which is received the virtue of ſmelling, and preſenting it to the common ſenſe. Over theſe two organs is placed *collatorium*, or the noſtrils, which concavity or ditch was made for two cauſes: Firſt, that the air, that bringeth the ſpirit of ſmelling might reſt therein, till it was received by its proper organs. Secondly, that the excrement of the brain might be hidden under it till it be fit to be ejected. From this concavity go two holes into the mouth, of which we may take notice of three conveniencies; firſt, that when a man's mouth is cloſed, either by eating or ſleeping, air might come through them to the lungs, or he would be forced to keep his mouth open always. Secondly, they are helpful to a man's ſpeech; for, when one or both of thoſe paſſages are ſtopped, a man ſpeaketh in the noſe, as we commonly ſay. Thirdly, they are uſeful in cleanſing the concavities of the noſe, either by ſnuffing, or drawing it through the mouth. The object of ſmell is an odour, or ſcent, which is a fume riſing from an odoriferous object, aſcending through the noſe to the ventricles of the brain; the ſtrong and violent hurteth the brain, the temperate and good doth rejoice, delight, and comfort. This ſenſe is oftentimes very uſeful in diſcovering meats and drinks of an evil odour, which otherwiſe would much prejudice the ſtomach, and work evil effects in the body of the man.

The TASTE is hot and moiſt, and under the influence of Jupiter: this ſenſe hath its reſidence in the palate of the mouth and tongue. Its office is to chooſe what food is congruous to the ſtomach, and what not. The ſkin of the palate of the mouth is the ſame with the inward part of the ſtomach, and the ſame with the way of the meat to the ſtomach; and hence it cometh to paſs, that, when a man is touched upon the palate of the mouth, it tickleth the ſtomach; and, ſo much the nearer to the throat, ſo much more the ſtomach abhorreth. The object of taſting is a ſavour or ſmack, whereof there are ſix ſimple kinds, as ſweet, ſour, ſharp, tart, ſalt, bitter; the compounds are many. And, being led to the mouth, it is not amiſs if I ſpeak a few words of the compoſition thereof. In the mouth are five parts to be conſidered, the lips, the teeth, the tongue, the uvula, and the palate of the mouth, of which I have already ſpoken. The lips are made of a muſculous fleſh: their office is, firſt, as the door to the houſe, to keep the mouth cloſe till the meat be chewed; ſecondly, they help to pronounce the ſpeech. The teeth, the hardeſt members, are faſtened into the mandible: their office is, firſt, to grind the meat before it goeth into the ſtomach, that ſo it may the better digeſt; ſecondly, that it might be a help to the ſpeech, for they that want any of their teeth are defective therein. The number is uncertain, ſome have more, ſome have leſs, they who have their full number have thirty-two. The tongue is a carnous member, compound, and made of many nerves, ligaments, veins, and arteries, ordained principally for three purpoſes: firſt, that when a man eateth, the tongue might turn the meat in the mouth till it be chewed; ſecondly, by the tongue, and the palate of the mouth, near the root of the tongue, is received the taſte of ſweet or ſour, and thence preſented to common ſenſes to paſs judgment thereof: thirdly, and principally, the tongue is ordained for the pronunciation of ſpeech, of which faculty I muſt crave leave to inſiſt on, and that as briefly as may be. Speech is an excellent preſent, and very neceſſary, given only unto man, *animi index & ſpeculum*; it is the interpreter and image of the ſoul; the heart's meſſenger: the gate through which doth paſs all that lieth within the dark and hidden corners of man: by this the ſpirit becomes viſible. Of all the external and viſible parts of the body, that which cometh neareſt to the heart is the root thereof, and that which cometh neareſt the thoughts is ſpeech: " Out of the abundance of the heart the mouth ſpeaketh." It is a powerful maſter, an imperious commander; it ſtirreth up, animateth, exaſperateth, appeaſeth, maketh ſad, merry; it imprinteth whatever paſſion it handleth; feedeth the ſoul of the hearer; it maketh him bluſh, wax pale, laugh, cry, tremble, mad with choler, leap for joy, what not? It is the agent of all our concerns; by it we traffic, peace is handled, affairs are managed, it is the band of human ſociety: hearing and ſpeech anſwer and are accommodated the one to the other; by theſe two the ſouls are poured the one into the other; ſo that, if theſe two gates be ſhut (as it is in thoſe that are deaf and dumb), the ſpirit remaineth ſolitary and miſerable. Hearing is the gate to enter, by it the ſpirit receiveth all things from without. Speech is the gate to go out, through it the ſpirit ſendeth forth that which was within. From the communication of theſe two, as from the ſtroke of two flints, there cometh forth the fire of truth; and ſo by the poliſhing and rubbing of theſe two, knowledge cometh to perfection; but hearing is the firſt and principal, for there can nothing come forth which did not firſt enter; and therefore he that is deaf altogether by nature is alſo dumb.

I might enlarge a great deal more in the deſcription of the head, but, my purpoſe being to declare nothing but what may be pertinent in the manifeſtation of the human faculties and virtues, I ſhall conclude this diſcourſe with a word or two of the ſenſe of FEELING, which is of no particular quality, but of all, hot, cold, dry, and moiſt; it is deputed to no particular organ, but is ſpread abroad over the whole body; it is the index of all tangible things, its object then muſt be heat or cold, drought or moiſture, things pleaſant and polite, ſharp and ſmarting, motion, reſt, tickling. It is known that man and other creatures may live without ſome particular ſenſe; it is the opinion of moſt, that a man cannot live without this ſenſe of feeling, being only neceſſary unto life; yet Auguſtine proveth the contrary, in the fourteenth book, *De Civitate Dei*, by example of a preſbyter, that lay as though he were dead, and did not feel thoſe that pulled him, nor would he ſtir though they burned him with fire; yet confeſſed that he could then hear men ſpeak (if they ſpoke aloud) as though they were far from him, by which it appears, that this he did, not by reſiſting, but for want of the ſenſe of feeling, which afterwards was reſtored to him again. I ſhall paſs by what the Engliſh hiſtory relates of one Elizabeth Barton, a maid of Canterbury, who oftentimes was deprived of her ſenſes by reaſon of a diſeaſe ſhe had.

I ſhall alſo wave diſputes concerning the number of the ſenſes, ſome ſuppoſing there are no more in nature than are apparent in us. There may very well be more, yet greatly to be doubted that there are; it is impoſſible for us to know them, to affirm them, or to deny them, becauſe a man ſhall never know the want of that ſenſe which he never had: one ſenſe cannot diſcover another; and, if a man want one by nature, yet he knows not which way to affirm it. A man that is born blind, and hath not heard what ſight is, cannot conceive that he ſeeth not, nor deſire to ſee. So man, being not able to imagine more than the five that he hath, cannot know how to judge whether there be more in nature: who knoweth whether the difficulties that we find in many of the works of nature, and the effects of many creatures which we cannot underſtand, do proceed from the want of ſome ſenſe that we have not? There are hidden properties which we ſee in many things, and a man may ſay that there are ſenſible faculties in nature, proper to judge and apprehend them, yet muſt conclude we have them not; who knoweth whether it be ſome particular ſenſe that diſcovereth the hour of midnight to the cock, and moves him to crow, or how beaſts are taught to chuſe certain herbs for their cure, and many ſuch-like wonders?

## OF THE STOMACH.

THE STOMACH is a member compound and ſpermatic, ſinewy and ſenſible, wherein is made the firſt perfect digeſtion of chyle: it is a neceſſary member to the body, for, if it fails in its operations, the whole fabric is corrupted. It is in the little world the ſame as the terreſtrial globe is in the great world; in it is expreſſed the ſublunary part of the world; in it are contained the parts that ſerve for nutrition, concoction, and procreation. And this leads me to diſcourſe of the adminiſtering virtues in man, which are here ſeated, and to wind up all with a touch of the office of the microcoſmical ſtars with as much brevity as may be. The ſtomach is framed of two panicles, the outer is carnous, the inner nervous, from which is ſtretched to the mouth *æſophagus*, or the way of the meat, by which the ſtomach draweth to itſelf meat and drink as with hands. By the virtue of the ſubtile will, which is in this *muſcus longitudinalis*, is made the attractive virtue, which is hot and dry, by a quality active, or principal, which appears by the ſun, the fountain of all heat, which is of an attractive quality, which is evident by his attracting and exhaling the humidity from this inferior globe into the airy region, as into the neck or higher part of an *alembic*; and, being reſolved into water, (by reaſon of their weight,) fall down again upon the earth, which is the veſſel receiving: ſo, through continued diſtillations, by ſublimation of the water, by cohabation, by drawing off the liquor (being often poured on), and fortified by the influence of the celeſtial and central ſun, the body becomes endued with a concoctive, nutritive, and procreative, virtue. So in the ſtomach, by the active quality of the microcoſmical ſun, his benevolent rays, and friendly heat, meat and drink are deſired, and attracted into the ſtomach, for the nouriſhment of the whole body.

In the ſtomach is a tranſverſe muſcle, to withhold or make retention; by this retentive virtue, thoſe things that are brought into the ſtomach are kept and withholden until nature hath wrought her end, and every faculty hath executed its office. It is in quality cold and dry: cold, becauſe the nature of cold is to compreſs or hold together, as you may ſee in ice; dry, becauſe it is the nature of drineſs to keep and hold what is compreſſed. It is under the influence of Saturn, and that is the reaſon why, for the moſt part, men that are cold and dry of temperature, or, as aſtronomers ſay, Saturnine people, are covetous and tenacious; and that is the reaſon that old men are naturally covetous, becauſe Saturn ruleth old age, and, by the decay of nature, the temperature becomes cold and dry. It hath the ſpleen, the repreſentative of Saturn, lying toward the left ſide, and furniſheth the ſtomach with humours neceſſary to fortify the retentive virtue.

The digeſtive faculty, which is the chief and moſt principal, (the others like handmaids attending it,) is hot and moiſt, nature's cook and principal workman, the archæus and central fire which in this philoſophical veſſel, viz. the ſtomach, digeſteth the victuals into a chaos, or confuſed maſs, that ſo a natural ſeparation may be made. It is under the influence of Jupiter, who furniſheth it with friendly heat and moiſture, by the liver, (the microcoſmical Jupiter,) chafing and heating the right ſide of the ſtomach.

The ſtomach hath alſo a latitudinal muſcle, or will, which makes the expulſive faculty; it is naturally cold and moiſt; cold, to compreſs the ſuperfluity; moiſt, to make the matter ſlippery and fit for ejection, alſo to work a ſuitable diſpoſition in the body. It is a neceſſary operation by it, after the ſeparation of the pure from the impure, the elements from the *caput mortuum*, or rather *fæces*, is removed and carried away, all that is needleſs or prejudicial to nature. It is under the dominion of the Moon, (with whom you may join Venus, being of the ſame nature,) whoſe epitome or microcoſmical ſubſtitute, viz. the brain, ſendeth a branch of nerves to the ſtomach, and thereby furniſheth it with humours, cold and moiſt, fit for expulſion.

Or

## OF THE HEART.

THE HEART hath two ventricles or concavities, and the left is higher than the right; the cauſe of its hollowneſs is to keep the blood for his nouriſhing, and the air to abate and temper the great heat which is included and ſhut up in the concavities.

As he is *ſol corporis*, and center of the reſt of the members and ruler of the family, he communicates to them life and motion, yet by his heat he attracts what is needful for himſelf from the other members, as a ſubſidy or tax impoſed upon his ſubjects. And therefore to the right ventricle of the heart cometh a vein from the great vein, which receiveth all the ſubſtance of the blood from the liver; this vein paſſeth to the right ventricle of the heart, and bringeth a great portion of the thickeſt and pureſt blood to nouriſh the heart. The reſidue that is left of this is made more ſubtile through the virtue and heat of the heart, and then ſent into a concavity or pit, in the midſt of the heart, between the two ventricles; therein it is made hot and pure, and from thence it paſſeth to the left ventricle, and there is engendered in a ſpirit that is clearer, brighter, and ſubtiler, than any corporeal or bodily thing which is engendered of the four elements, for it is a mean between the body and the ſoul; wherefore, of the philoſophers, it is likened more to heavenly than earthly things.

From the left ventricle of the heart ſpring two arteries, the one having but one coat, and therefore is called *arteria venalis*, which carries blood from the heart to the lungs, which blood is vaporous and fit for its nouriſhment, and carrieth back air from the lungs to refreſh the heart.

The other artery hath two coats: it is called, *vena arterialis*, or the great artery, of which ſpringeth all the other arteries, that ſpread to every member of the body, which carry the ſpirits, which are the treaſures of the ſoul's virtue; thus it paſſeth till it come to the brain, and be made an animal ſpirit; at the liver it is made nutrimental, and at the teſticles generative. Thus by the heart is made a ſpirit of every kind, and (like the ſun in the heavens) by his royal preſence he doth confer life and liberty to his ſuppliants.

The motion of the heart is wonderful; it continues to the utmoſt period of life, day and night, without a ſingle moment's interruption or intermiſſion; and is performed more than an hundred thouſand times every day. Here is, indeed, ſomething like what the mechaniſts want, under the name of a perpetual motion; and the ſtupendous wiſdom of the Creator is in nothing expreſſed more glorioufly.

Of

## OF THE LUNGS, LIVER, &c.

THE LUNGS are made of a ſubſtance very ſoft and ſpongious; ſupple to draw and inforce from, like a pair of bellows; they are an inſtrument of reſpiration, whereby the heart is refreſhed, drawing unto it the blood, the ſpirits, and the air, and diſburthening itſelf of thoſe fumes and excrements which oppreſs it. They are naturally cold and dry, accidentally cold and moiſt; naturally cold and dry, waving about the heart, abating its heat by a refreſhing blaſt; they are accidentally moiſt, by reaſon of catarrhs and rheums, which they receive from the brain.

There are three principal parts in the lungs conſiderable. One is a vein coming from the liver, which bringeth with it the crude and undigeſted part of the chyle to feed the lungs. Another is *arteria venalis*, coming from the heart, bringing the ſpirit of life to nouriſh the lungs. The third is *trachia arteria*, that bringeth air to the lungs; and it paſſeth through all the left part of them to do its office.

The lungs are divided into five portions or pellicles, three on the right ſide and two on the left ſide; that, in caſe any impediment or hurt ſhould happen in any one part, the other ſhould be ready to ſupply the office.

But I ſhall give no further deſcription of the lungs, but deſcribe the liver, which is a principal member in the little world, repreſenting the planet Jupiter, *quaſi juvans pater*, hot and moiſt, inclining towards the right ſide, under the ſhort ribs. The form of the liver is gibbous, or bunchy, on the back-ſide; on the other ſide hollow, like the inſide of an hand, that it might be pliable to the ſtomach, (as a man's hand is to an apple, or any thing that is round,) to further its digeſtion; for his heat is to the ſtomach as the heat of a fire is to the pot which hangeth over it. It is the ſtorehouſe of the blood, the fountain of the veins, the ſeat of the natural nouriſhing faculty, or vegetative ſoul, engendered of the blood of that chyle which it draweth from the meſeraique veins, and receiveth by the *vena porta*, which entereth into the concavities thereof, and afterwards is ſent and diſtributed through the whole body by the help of *vena cava*, which ariſe from the bunch or branches thereof, which are in great numbers, as the rivers from the ocean.

The natural and nutrimental faculty hath its reſidence in the liver, and is diſperſed through the whole body with the veins, from which are bred four particular humours, viz. blood, choler, phlegm, and melancholy.

Blood is made of meat perfectly concocted, in quality hot and moiſt, Jupiter's darling, the moſt perfect and neceſſary humour (the other three being ſuperfluities, yet neceſſary too). The blood thus concocted is drawn out by the *vena cava*, whoſe branches, ramifying upwards and downwards, carry and convey it to all the other members of the body for their nouriſhment, where, by a third digeſtion, it is tranſmuted into the fleſh.

Choler, or bile, is made of meat more than perfectly concocted; it is the ſpume or froth of blood; it clarifieth all the humours, heats the body, and nouriſheth the apprehenſion. It is in quality hot and dry; it fortifieth the attractive faculty as blood doth the digeſtive; it moveth man to activity and valour: it is under the planet Mars, whoſe reſidence is in the gall, which is an official member, a purſe or particular veſicle placed in the hollowneſs of the liver, whoſe office is to receive the choleric ſuperfluities, which are engendered in the liver as aforeſaid. Which purſe, or bag, hath three holes or necks. By the firſt it draweth to itſelf the choler from the liver, that ſo the blood be not hurt by the bile, or choler. By the ſecond it ſendeth choler to the bottom of the ſtomach, to fortify the attractive faculty. And, laſtly, it ſendeth choler regularly to every gut, from one gut to another, to cleanſe them from ſuperfluities and droſs.

Phlegm is made of meat not perfectly digeſted: it fortifieth the virtue expulſive, and maketh the body fit for ejection; it is kind to, and fortifieth, the brain by its conſimilitude with it; it is antipathetical to the apprehenſion, and doth much injure it, therefore phlegmatic perſons have but weak apprehenſions; it is cold and moiſt in quality, its receptacle is in the lungs, it is governed by the Moon and Venus; therefore it qualifies the bile, cools and moiſtens the heart, thereby ſuſtaining it and the whole body from the fiery effects which continual motion would produce.

Melancholy is the ſediment of blood: it is cold and dry in quality; it maketh men ſober, ſolid, and ſtaid, fit for ſtudy, or any ſerious employments; it curbs the unbridled paſſions incident to the ſanguine complexion: it ſtayeth wandering and idle thoughts, and reduces them home to the centre; it is like a grave counſellor to the whole body. It is governed by the planet Saturn, it ſtrengtheneth the retentive faculty, and its receptacle is in the ſpleen; which in the body is placed on the left ſide, tranſverſely linked to the ſtomach.

## OF THE REINS AND KIDNEYS.

THE REINS and KIDNEYS are placed within the region of the nutrites backwards, and they are ordained to cleanſe the blood from the watery ſuperfluities. They have two paſſages: by the one is drawn the water from the *venakelis* by two veins, which are called *venæ emulgentes*, the emulgent veins; and by the other is ſent the ſame water to the bladder, and this is called *poros urithedes*.

The kidneys are made of a hard ſubſtance, and full of hard concavities, and therefore the ſores of them are hard to cure; they are harder in ſubſtance than any other fleſhy member, and that for two cauſes; the firſt is, that they be not much hurt by the ſharpneſs of the urine; the other is, that the urine that paſſeth from them might be the better cleanſed. The heart ſendeth an artery to convey to them blood, heat, ſpirit, and life. And from the liver there cometh a vein, which bringeth nutrimental blood. Their fatneſs is, as of other members, made of thin blood congealed by cold; there is the greater quantity in this place, becauſe it ſhould temper the heat of the kidneys, which they have from the biting ſharpneſs of the urine.

The next thing is the bladder, which is compounded of two nervous panicles; in complexion it is cold and dry, whoſe neck is carnous, and hath two muſcles to withhold and to let it go; in man it is long, and is contained with the yard, paſſing through the *peritoneum*; but in women it is ſhorter, and is contained with the *vulva*. The place of the bladder is between the ſhare-bone and *longaon*. In women it is between the aforeſaid bone and the matrix. In the bladder are implanted the ureters, which bring the urine or water from the kidneys thither, and enter into the holes and panicles thereof, which is done by a natural motion between tunicle and tunicle, till the urine findeth the hole of the nether tunicle, where it entereth privily into the concavity. And the more the bladder is filled with urine, the ſtraiter are the panicles compreſſed together; the holes are not ſet one againſt the other, ſo that, if the bladder be never ſo full, none can go back again.

This is the microcoſmical ocean, into which all the rivers of the body diſcharge themſelves. There muſt needs be more than a watery ſubſtance in it, for many times, in diſeaſes, it is plentifully made, though the patient drinketh little or nothing; and it is obſerved that creatures that drink nothing will make water. Phyſicians oftentimes foretel many things by its colour, thinneſs, and thickneſs. Salt you know is hid in meats, and that plants have very much ſalt in them you may find by diſtilling them; and it is very well known, that by the chymical art many kinds of ſalt may be fetched out of urine. The artificial *cryſocolla* is made of urine. Nitre is made of earth moiſtened with the urine and dung of living creatures.

## OF THE GENERATIVE PARTS.

THE inſtruments of generation are of two ſorts, male and female; their uſe is the procreation of mankind, the operation is by action and paſſion, the agent is the ſeed, the patient the blood. Although this cometh to be ſpoken of in the laſt place, yet it might have deſervedly been put in the firſt; for nature regards not only the conſervation of itſelf, but to beget its like and conceive its ſpecies. Venus hath the principal goverament of the members of generation, in which members there are many parts deſerving our attention.

Firſt; of the genitals of men:---The firſt thing to be conſidered is, that which anatomiſts call *vaſa preparentia*, or preparing veſſels, which bring blood and vital ſpirits to the teſticles; they are four in number, and before they come to the teſticles they make a curious implication, intertexture, or twiſting, the one with the other, the arteries into the veins, and the veins into the arteries, which phyſicians call *corpus varicoſum*; ſome call it *pompiniformis*: this interweaving reacheth down even into the ſubſtance of them; their uſe is to mix the blood and vital ſpirit together, that ſo they may have a fit matter to work on.

The teſticles are of a white, ſoft, ſpongy, ſubſtance, full of ſmall veins and arteries; or elſe, when humours flow to them, they could not ſwell to ſuch a bigneſs: their form is oval; of their bigneſs few are ignorant. Each teſticle hath a muſcle, which the learned call *cremaſter*, which ſerveth to pull them up in the act of generation, as its name in the Greek ſignifieth, that ſo the veſſels, being ſlackened, may better void the ſeed.

The ſeed being thoroughly concocted by the teſticles, there are two other ſmall pipes called *vaſa deferentia*: they are alſo called ſpermatic pores: their office is to carry the ſeed to the ſeminary veſſels, which are to keep it till need requireth its expulſion. From the ſtones they ariſe very near to the preparing veſſels into the cavity of the belly; then, going back again, they turn to the back ſide of the bladder, between it and the right gut, where they are joined to the ſeminal veſſels, which are ſoft and ſpongy, ſomewhat like kernels, through which paſſeth the *urethra*, or common paſſage in the yard both for ſeed and urine.

Hiſtories make mention, and experience evinces, that ſome are born without teſticles, ſome with one. Philip, Landgrave of Heſſia, had three; he was ſo full of ſeed, and prone to venerous actions, that his wife could not ſuffer him ſo often as neceſſity urged him to it, he otherwiſe being chaſte and honeſt; he, relating his mind to the prieſts, with the conſent of his wife, took a concubine.

It is unneceſſary for me here to deſcribe the yard, and all the parts thereof, as their form, office, texture, ſympathy, &c. will hereafter be more particularly treated of in the anatomical analyſis, in this place therefore I only mean to give a brief touch of the moſt conſiderable parts.

I now come to the generative parts of women; and firſt of the *clytoris*, which is a ſinewy and hard body, much like the yard of a man, and ſuffers erection and falling, cauſeth luſt in women, and giveth delight in copulation: Avicenna calleth it the wand, or *albathara*; and Albucaſis calleth it *tentigo*; and Fallopius ſaith, that this hath ſometimes grown ſo big, that women would copulate with others like men. This obſerve, that the paſſage of the urine is not through the neck of the womb;

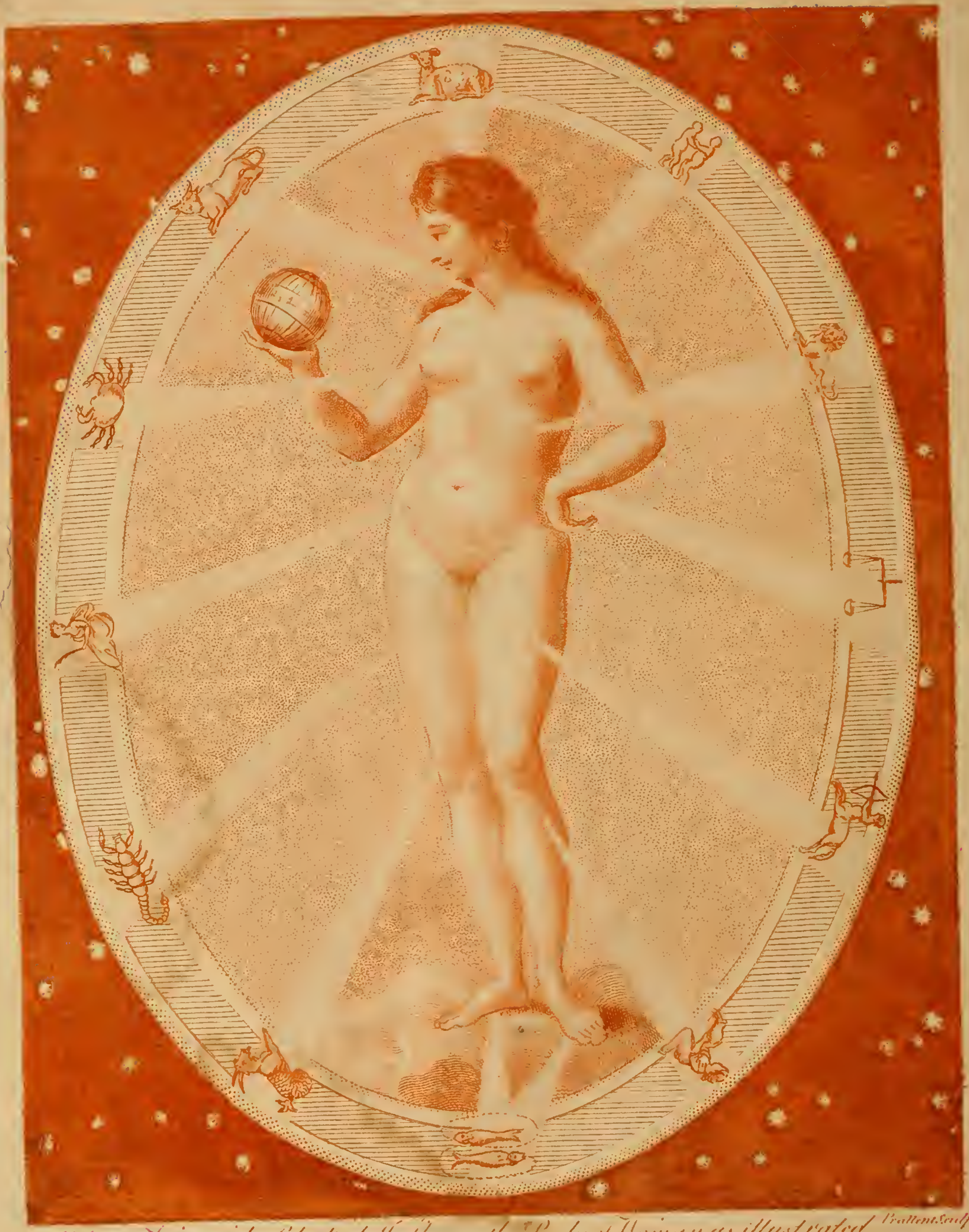
near the paſſage of the urine are four caruncles or fleſhy knobs, they are called *myrtiformes*, becauſe they reſemble myrtle berries; the uppermoſt of them is largeſt and forked, to receive the neck of the paſſage of the urine; the others lie below this on the ſides, and are to keep back the air of any hurtful thing from the womb. In virgins theſe knobs are joined together by a thin ſkin, interlarded with ſmall veins, with a hole in the middle about the bigneſs of one's little finger, through which paſſeth the menſtruous blood: this ſkin is a note of virginity, for the firſt act of copulation breaketh it. I believe that this was that note of virginity which God gave to the Hebrews. Theſe knobs joined together do much reſemble a roſe not quite blown, therefore called a flower, whence came the word to deflower a virgin. If I ſhould take upon me to declare the opinions of authors, it would prove (almoſt) an endleſs taſk; this I ſhall add, that I conceive it not a certain note of virginity, becauſe it may be broken without the act of copulation; as, namely, by applying peſſaries to provoke the menſtrues, or by a defluxion of ſharp humours, &c. but it is probable that the Jewiſh virgins were more careful of it, their reputations depending thereon.

The womb in figure is almoſt perfectly round, in virgins about the bigneſs of a walnut, yet, when a woman has conceived with child, it dilates itſelf to ſuch a capacity, that it is able to contain the child; the mouth of it is no bigger than to receive the glans of the yard, yet at the delivery makes room for the child to come out, be it ever ſo big: this made Galen admire, and it may be a great admiration to all, if we conſider the wonderful works of God in the creation of man: he who knows himſelf may know there is an all powerful God! and therefore it was engraven with letters of gold over the porch of the temple of Apollo, the god (according to the Panims) of knowledge and wiſdom, this ſentence---*Know thyſelf*---as a ſalutation unto all; ſignifying, that he who would have acceſs unto that divinity, and entrance into that temple, muſt firſt know himſelf.

The womb before conception is ſmall, becauſe the ſeed, being but little in quantity, might be cloſe embraced and cheriſhed. Women have teſticles or ſtones as men have, but they differ from men's in theſe particulars: they are within the belly in women, in men without; they are not ſo ſmooth in women as in men; they are leſs than the ſtones of men; they are not ſtaid by muſcles, but by ligaments; as men's are oval, they are flattiſh; they have but one ſkin, men's have four, becauſe they are without the body, and expoſed to the cold; they are more ſoft and cold than men's are. But they are ordained both in men and women for the ſame uſe viz. to concoct ſeed; and, though Ariſtotle denied ſeed in women, yet Hippocrates, one of the ancients of phyſic, was of this judgment; and reaſon and experience confirm it.

The *vaſa preparentia*, the preparing veſſels, and *vaſa deferentia*, carrying veſſels, are of the ſame nature and office as they are in men; they differ only in this, that they are ſomewhat ſhorter, having a ſhorter way to go, the teſticles being within the belly in women; but, leſt the ſhortneſs of the paſſage ſhould hinder their operation, God and nature have ſo provided, that they are more twiſted and interwoven than they are in men, that they may the better mingle the blood and vital ſpirit.

Thus have I given you a ſhort deſcription of man, the maſter-piece of God's workmanſhip: and in whom is compriſed a ſmall draught of all things in the univerſe. In man, as in a perſpective glaſs, may our mother-earth with her innumerable offspring be diſcovered; in him may the unruly and reſtleſs waves of the ocean be delineated; nor doth he only epitomize the elemental world, but alſo the celeſtial; in him are diſcovered the prudent, majeſtical, ſumptuous, magnificent, honourable, affable, and humane, ſolar quality: the unſteadfaſt, timorous, ſoon-daunted, oft-changing, and ſhifting, temper, among men, anſwers to the various motions of the low and oft-changing Luna. Others in profundity of imagination, reſervedneſs of words, auſterity of actions, &c. are a fit portrait of the melancholy planet Saturn. There are yet a few in the world who are faithful lovers of fair dealing, beneficent to all men, doing glorious, honourable, and religious, actions; juſt, wiſe, prudent; virtuous, &c. of the temper of benevolent Jupiter. There are (in our apprehenſions) too many of the Martial temper, who are valiant, lovers of wars, frays, and commotions, ſubject to no reaſon, bold, confident, willingly obeying nobody, &c. Nor is Venus excluded thoſe people's affections who love mirth in words and actions, muſical, delighting in venery, drinking, and merry-meetings, who trouble not themſelves with ſtate-affairs, nor are inquiſitive after armies or navies. Nor is Mercury without his party among us, who are ſubtile and politic, excellent diſputants and logicians, ſharp-witted, and able to learn any thing; men of unwearied fancies, and fit for any employment, yet unconſtant. The planetary influence in the good or ill diſpoſition of the air is lively repreſented in man. A healthy ſanguine conſtitution, or a delicate compoſure of heat and moiſture, anſwers to a ſerene and temperate air, with ſeaſonable moiſtening dews and ſhowers, which are the ſweet influence of the Sun, Jupiter, and Venus. The feveriſh, hot, and parching, diſtempers of the body, anſwer to the hot and ſcorching weather occaſioned by the fiery beams of Mars. Nor is the cold, chilly, melancholy, weeping, and lamenting, diſpoſition of many people, leſs repreſented by the melancholy, dark, cold, and wet, weather, proceeding from Saturn's influx. The intellectual world hath alſo in man its portraiture; witneſs the ſoaring contemplations of the ſoul of man, which cannot (like the body) be confined to any place, but in a moment ſurrounds this terreſtrial globe;



Dodd Delin

View of the Celestial Influx on the Body of Woman, as illustrated in Culpepers Family Physician and Sibleys Occult Sciences.

Pratlent Sculp.

globe; nor there content, but as ſoon mounts itſelf to the heavens, and ſearcheth their ſecret corners; nor there ſatisfied till he comes to the higheſt, for by his contemplations (having his original from the uncreated light) he reflects thither, viz. to the divine Majeſty of heaven!

## ANATOMICAL ANALYSIS OF THE HUMAN FRAME.

### OF THE SKIN.

THE SKIN is a membranous covering of the body, ſimilar, ſpermatic, having blood mixed with it, reddiſh, white, looſe, and the inſtrument of feeling. It hath cutaneous veins and arteries, as alſo nerves; from the laſt of which, it receives its quickneſs of ſenſe. From the capillary veins and arteries it receives blood for nouriſhment and vital ſpirit for quickening. Its temperature is cold and dry, or rather exquiſitely temperate, yet ſo that it may be the judge of feeling. The ſkin on the top of the head is thickeſt, that on the ſides thin, that on the face and palms of the hands thinner, that on the lips thinneſt of all; that on the tops of the fingers is mean, ſo that the ſenſe of touching may be the more perfect: its texture is ſlight, and very full of ſmall holes or pores, for the inſenſible tranſpiration of fumes, vapours, and ſweat. It takes its colour from the predominant humour, unleſs it be ſuch from the birth, as in Ethiopia. It has a double ſubſtance: the one is external, called *cuticula*, or the ſcarf-ſkin, becauſe it is placed upon the ſkin, as a cover or defence, every where perforated with pores, without blood and without feeling: its connexion is to the true ſkin, from whence it has its figure and colour; but, in blackmoors, the *cuticula* being pulled off, the ſkin itſelf is white. It has no action, only uſe, which is to ſhut up the pores of the ſkin, that the ichorous ſubſtance may not iſſue from the veins and arteries; to defend the ſkin from immoderate heat or cold; and to make it ſmooth, beautiful, poliſhed, and even. It is generated of a viſcous and oleaginous vapour of the blood. The other is the true ſkin, of which we have firſt ſpoken, which is ſix times thicker than the ſcarf-ſkin; its pores will appear in winter-time, if it be made bare and expoſed to the cold: for, where they are, the *cuticula* will appear like a gooſe-ſkin. The ſkin receives two cutaneous veins, through the head and neck, from the jugulars: two through the arms, breaſt, and back, from the axillaries: two through the lower belly, loins, and legs, from the groins, which are conſpicuous in women after hard labour, and in ſuch as have the *varices* in many branches. It has a few arteries, and thoſe very ſmall, in the temples and forehead, fingers, ſcrotum, and yard.

## Of the FLESH.

THE FLESH is a ſimilar, ſoft, thick, ſubſtance, well compacted, made of blood alone, if it be red; but of blood and ſeed, if it be white. It is four-fold, viz. muſculous, viſcerous, membranous, and glandulous; of which the two firſt are very red, but the two latter white. Muſculous fleſh is ſoft and red, and that which is properly termed fleſh. Viſcerous fleſh is that of the bowels, which is the proper ſubſtance of the lungs, heart, liver, ſpleen, and kidneys; it is red, hard, fitted to prop up the veſſels, and to aſſiſt them in their particular and various operations. Membranous fleſh is the fleſhy ſubſtance of every membranous part, as in the gullet, ſtomach, guts, womb, bladder. Glandulous fleſh is the fleſh of kernels; it is white, thick, and ſpongy, formed of ſeed (and therefore cannot properly be called fleſh), of which ſome anatomiſts make many diverſities; but the true ſearcher may find that the glandules differ not ſo much in ſubſtance as in their uſe and humour; which are, firſt, to ſupport the diviſions of the veſſels; ſecondly, to drink up ſuperfluous humours, becauſe they are of a hollow ſpongy ſubſtance, and are therefore vulgarly termed *emunctories*, or cleanſers of the noble parts, thoſe in the neck being accounted cleanſers of the head, thoſe in the arm-pits of the heart, and thoſe in the groin of the liver; thirdly, to moiſten the parts for their more eaſy motion, or to prohibit drineſs, ſuch are thoſe which are ſituated by the tongue, larynx, eye-corners, &c.

## Of the MEMBRANES.

A MEMBRANE is a ſimilar, ſpermatic, part; broad, ſoft, dilatable, white, containing and inveſting the parts, and carrying ſenſe to them. If, being a hollow body, it receives ſomething, as the ſtomach, bladder, gall, eye, it is called *tunica*, a coat; but, if it embraces and covers a ſolid body, it is called *membrana*, a covering: and thoſe which cover the brain are called *meninges*. It is indued with ſenſe from itſelf. Membranes are the only true organs of feeling, ſerving the animal ſpirits to this purpoſe. Its uſe is, to inveſt the parts of the body, to defend it from injuries by reaſon of its hardneſs and compactneſs, to give them the ſenſe of feeling, to ſtrengthen them, to join parts to parts, and to keep them united; to ſeparate alſo the parts, and to cloſe the mouths of the veſſels. Some membranes are thin, ſome thick: the thin membranes alſo differ; for the *perioſtion* of the ribs is thinner than the *pleura*; the *perioſtion* of the head is thinner than the *pericranium*; the *pia mater* is thinner than the *dura mater*. The proper membrane of the muſcles is thin, and is knit unto the muſcles by moſt thin filaments. Its uſe is to clothe the muſcles, and to ſeparate them one from another; and to impart to them ſenſe and feeling. The thick membrane is called by ſome a membranous muſcle, by others a nervous or fatty coat; it is called fleſhy, becauſe in ſome places, as about the loins, neck, ears, forehead, &c. it retains a fleſhy ſubſtance; but, in the abdomen of a man ripe in years, it has no fleſhy appearance at all. Its temperature is hot and moiſt, having its origin from blood: it is ſituated under the fat, and ſtretched out over the whole body univerſally, and is the fourth covering of the body, (but in beaſts it is next to the ſkin:) it has no figure but that of the body which it covers: its colour is various in divers places: in the neck, forehead, and privities, it is redder than elſewhere: in ſome places it is joined to the fat inſeparably, in other places it may be ſeparated; and it communicates with the principal parts by the extremities of the veins, arteries, and nerves. It is very ſenſible, ſo that the rigour and trembling of the body depend thereupon: its uſe is to give foundation to the collecting and generating the fat, and to keep the fat in its due place, as alſo to divide one muſcle from another, and all of them from the other fleſh; to clothe the body, cheriſh the internal heat, and to defend it from external injuries: it ſticks cloſe to the fat, to the muſcles, and to the ligaments of the bones, and is firmly joined to the back in faſhion of a membrane, from whence it is ſaid to ariſe; it is ſo cloſely joined to the *muſculus latus*, that in the neck and forehead it can ſcarcely be ſeparated from it, whereby it is thought to conſtitute the ſame: to the ſkin it ſticks by very many veins, ſome few arteries, branches of nerves, and an innumerable quantity of membranous fibres.

## OF A FIBRE.

A FIBRE is a ſimilar ſpermatic part, diſperſed through the ſkin, fleſh, and membranes, to make them the more firm, and, being naturally diſtended, to contract again in the ſame manner. By reaſon of the various ſituations thereof, it is ſaid to be either right, oblique, tranſverſe, or round, whereby it may not only help the membrane, but ſtrengthen it, as alſo the ſkin and fleſh of muſcles; and, when dilated, reduce them to their natural ſtate. Each ſort of fibre is ſaid to perform a ſeveral action: as, the right to attract or draw to; the oblique to expel or thruſt fort; the tranſverſe to retain or hold; and the round to conſtrain or bind. But theſe actions of the fibres are not made ſo much by their own ſingular virtue as by the virtue of the member which they ſerve, or belong unto, from which they have their ſenſe and nouriſhment; for of themſelves they are ſenſeleſs.

## OF A LIGAMENT.

A LIGAMENT, or band, is a ſimilar, ſpermatic, dry, part, adhering firmly to the bones, tying the parts of the body mutually together. Its ſubſtance is ſolid, white, bloodleſs, ſofter than a griſtle, and harder than nerves and membranes; being of a middle ſubſtance between them. It is without cavity, ſenſe, or motion: their ſubſtance is in ſome places ſofter and more membranous than others, as in all ligaments which go about the joints. Their uſe is like a cord to connect or bind the parts of the body one to another, chiefly the bones, and to keep them ſo together, that they may not be luxated or disjointed. As to ſituation, ſome are within or among the bones, as the griſtly ligaments, which are thick and round: ſome are externally wound about the bones, which are thin and membranous. As to figure, ſome are broad, which are called membranous; others round and nervous: but they are called membranous and nervous only in reſpect to their external form or reſemblance, not to their internal eſſence; for they are all void of ſenſe, which they would not be were they compoſed of the true ſubſtance of a nerve or membrane. All the ligaments are ſolid, none hollow, except the ſlender ligaments of the womb.

## OF A CARTILAGE OR GRISTLE.

A GRISTLE is a ſimilar, ſpermatic, part, drier and harder than a ligament, but moiſter and ſofter than a bone, rendering the articulation the more pliable, and defending ſeveral parts from external injuries. Some are ſofter, eſpecially about the joints; others harder, and not much differing from the nature of a bone; and ſome are in proceſs of time turned into bones, eſpecially in aged people. It is without marrow, cavities, or ſenſe, being endowed neither with nerves nor membranes. Its matter is the ſame with that of the bones, being a moiſt earthy part of the ſeed, partly clammy and gluey, and partly fat, but more viſcous than fat: its uſe is to facilitate motion, that the bones rubbing one againſt another ſhould not wear and fret; to defend ſome parts from external injuries, itſelf being ſcarcely ſubject to any: to ſhape parts prominent or hollow, as in the ears, *larynx*, &c. to fill up hollowneſs in the joints, as in the knees; to ſerve for a cover, as in the *epiglottis*; to ſuſtain or underprop ſomewhat, as the griſtles of the eye-lids to bear the hairs; and to make a connection or joining of the bones. Their ſituation, magnitude, and figure, are various, according to the bones they are joined with; their ſubſtance is ſometimes harder, as thoſe which in time become boney: ſometimes ſofter, reſembling a ligament,

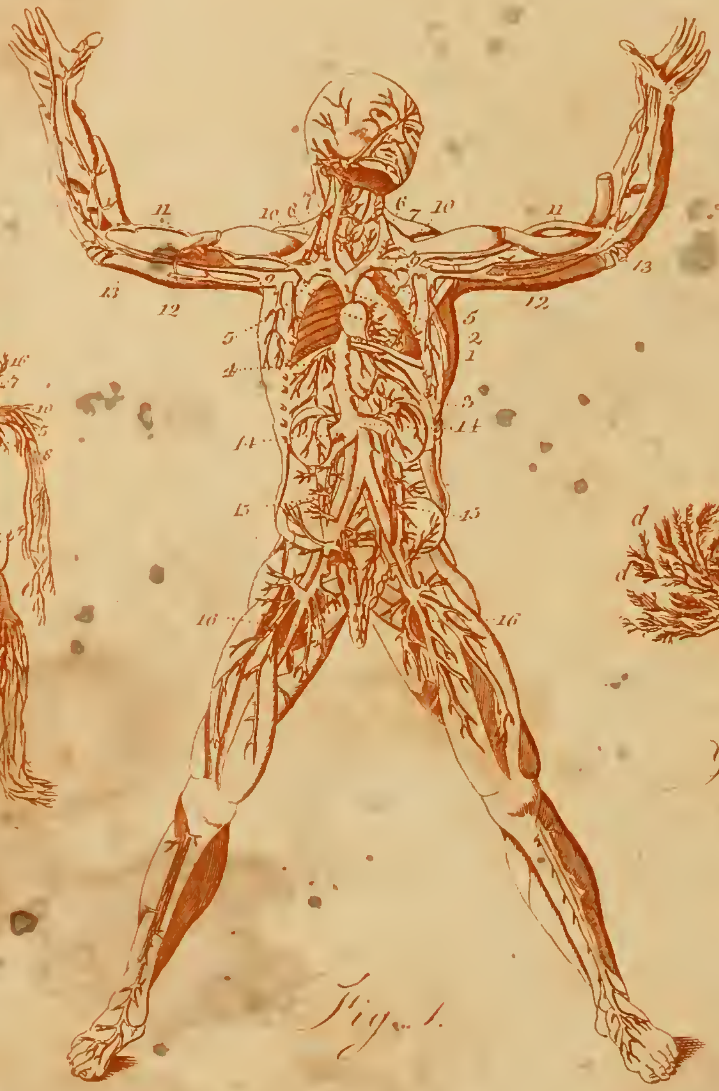

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Fig. 1.

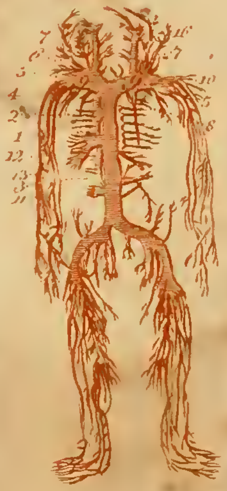
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Fig. 2d.

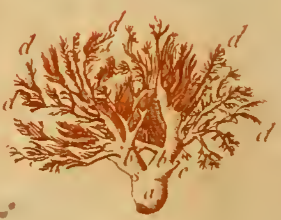


Fig. 3d.

The Veins of the Human Body.

ment, and are therefore called griſtly ligaments; yet, though hard, they are flexible and tough, becauſe encompaſſed with viſcous ſlimy matter. As to their connection, ſome conſtitute parts in themſelves, as that of the noſe; others grow to the bones which knit them together, without any other medium, as in the ſhare or breaſt bones; or by common ligaments coming between, as in that joining called looſe articulation.

## OF A TENDON.

A TENDON is a ſimilar, ſpermatic, ſolid, part, cold and dry, having a peculiar ſubſtance, continued from the beginning to the end of a muſcle, and the chiefeſt part thereof upon which the action of the muſcle depends, and no where to be found out of a muſcle. It has a nervous-like ſubſtance, yet extremely differing from a nerve; white, thick, hard, ſmooth, and extended according to the length of the muſcle, being ten times bigger than a nerve. Its figure is either ſolid and round, as in the *muſculus biceps*; or plain and membranous, as in the muſcles of the abdomen, being alſo either ſhort or long, and of a uniform ſubſtance in all its parts; ſo that, if it is nervous at the beginning, ſo it is at the end; but ſometimes it is nervous at the end, when the head of it is fleſhy; and, if its beginning is like ſmall ſtrings, they are united to form the tendon afterwards. The hard and ſtiff tendons have much fat about them, to ſoften them, that they may be the more pleaſantly moved; and therefore thoſe fibres diſperſed among the fleſh are nothing elſe but the tendon divided, and the tendon nothing elſe but fibres united; and therefore a tendon is either ſolid, compact, and united, or elſe diſgregated, ſevered, and divided into fibres. United is, where the whole tendinous part appears white, and hard, either in the beginning, end, or middle, or in all thoſe parts. Severed or divided, when produced into innumerable ſmall fibres, ſcarcely diſcernible to the ſight; being compaſſed about with fleſh.

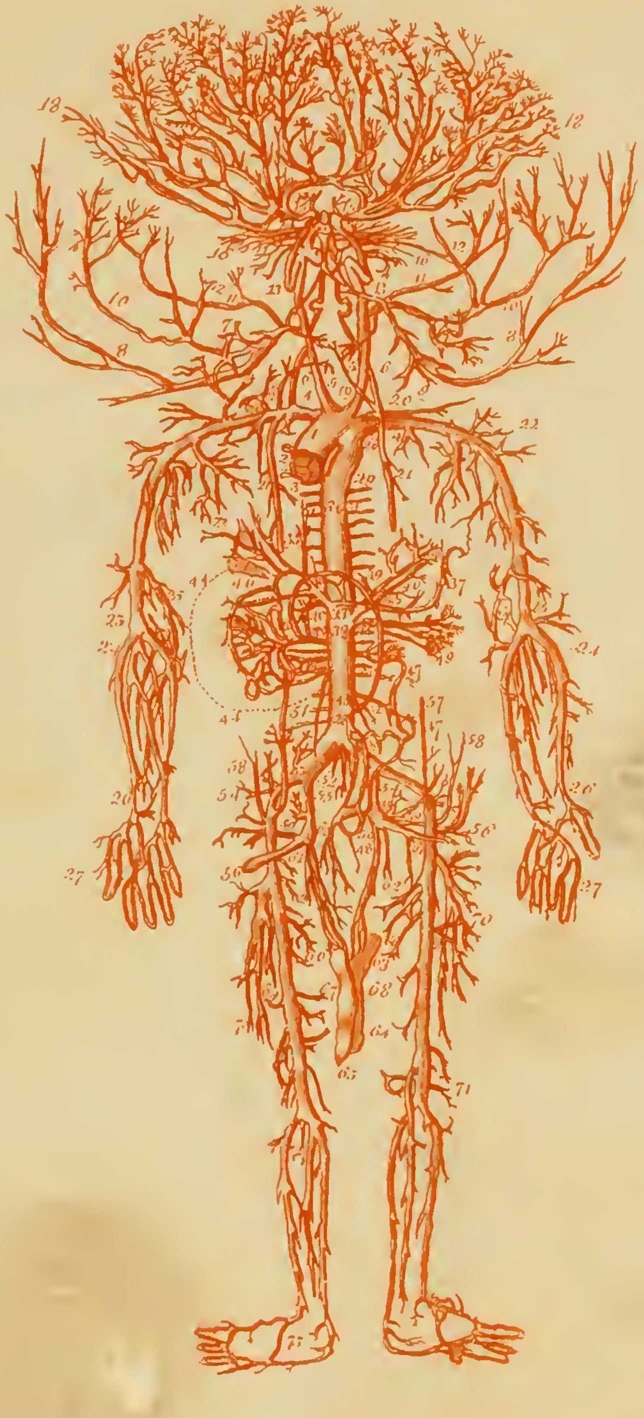
## OF THE FAT.

FAT is a ſimilar, ſoft, oily, white, inſenſible, part: made to preſerve the natural heat, to help chylification, to facilitate motion, to moiſten other parts, and to nouriſh the body in famine, Its ſubſtance is two-fold, viz. greaſe and ſuet, which, although it is ſomewhat ſolid, yet is ſoft and oily, as may be perceived by handling: greaſe or *axungia* is eaſily melted, but not ſo eaſily congealed; *ſevum* or ſuet is not ſo eaſily melted, but more eaſily hardened. Its origin is from the thinner parts of the blood, ſweating through the veins like dew, and congealing about the fleſh: this is the eſſential matter of fat; its efficient cauſe is a moiſt and temperate heat, (which is alſo the quality thereof;) the cauſe of its congealing is the coldneſs of the membranes from whence it has its white colour: but this coldneſs is not ſimple, but reſpective to other parts. Melted lead or wax will congeal in hot places, if the heat be leſs than that heat which will melt them: hence Galen determines fat to proceed from coldneſs; ſo that the fat, thin, and light, part of the blood, in colder conſtitutions is reſerved; whilſt in hotter bodies it turned to nutriment, ſo that hot and dry bodies are hardly ever fat. Its ſituation is immediately under the ſkin, univerſally over the whole body, the forehead, eyelids, and privities, excepted: whence it is, that the fatty membrane is as large as the ſkin, and ſticks firmly to it, neither can it be divided from it without ſcraping; and ſo alſo it ſticks to the fleſhy membrane. It cannot communicate with the principal parts, becauſe it is not truly nouriſhed; nor yet lives, unleſs by oppoſition, as ſtones do, nor is it indeed ſenſible; therefore it wants both veins, arteries, and nerves, yet all three of them paſs through it to the ſkin. The fat of the belly has three veins: the external mammillary, deſcending from above; the *vena epigaſtrica*, ariſing from beneath, or out of the crural vein, through the groin; and that coming out of the loins, having many veins accompanied with arteries: through theſe, and the veſſels of the ſkin, cupping-glaſſes, and ſcarifications, draw humours out of the inward parts. It has a great number of kernels, which receive excrements out of the body into themſelves; and they are more numerous in ſickly perſons, and ſuch as abound with excrementitious moiſture. Its uſes are to cheriſh the natural heat: to help the concoction of the ſtomach; to moiſten hot and dry parts, ſuch as the heart; to facilitate motion in the principal parts, as in the griſtles and jointings of the greater bones, and about certain ligaments, as alſo in the ſocket of the eye, leſt by its continual motion it ſhould become dry and withered; to ſerve as a pillow or bulwark againſt blows, bruiſes, and contuſions, and therefore the palms of the hands, buttocks, and ſoles of the feet, have plenty of fat; to nouriſh the body in time of long faſting; to fill up the empty places in the muſcles, and to underprop the veſſels, that they may paſs ſafely; and laſtly, to fill up all the vacuities of the other parts, veſſels, and ſkin, that the body may be rendered ſmooth, white, ſoft, fair, and beautiful.

Hitherto we have treated of parts abſolutely ſimilar; thoſe which are ſo only in appearance or to ſenſe are in number five, viz. veins, arteries, nerves, muſcles, and bones; of all which we ſhall now treat in order.

## OF VEINS.

A VEIN is a ſimilar, ſpermatic, membranous, round, long, hollow, part, every where joined by anaſtomoſes to the arteries; allotted to receive and contain the blood from them, to be farther concocted, and to be carried to the heart and liver, and to diſtribute it over the whole body. The original of their diſpenſation, or place from whence they riſe, is the liver, where blood is made; and that the firſt ſanguification is made there, and not in the heart, is apparent, becauſe there are no paſſages to convey the chylus to the heart, nor any receptacles for the excrements of the firſt concoction placed by the heart; all which requiſites are found in the liver. Moreover blood is carried from the liver to the heart, but not from the heart to the liver: for it cannot go out of the heart into the liver, becauſe of the valves, though mediately, when it runs back out of the arteries, it may be carried thither. Alſo the *vena cava* and *porta* enter not into the heart, but the liver; and, in a child in the womb, the navel-vein with blood (which nouriſhes the child) goes not into the heart, but into the liver; nor is ſanguification ever hurt but when the liver is hurt. The veins have only one tunicle, with many valves within, eſpecially in the external joints; they are nouriſhed with blood, not with that contained within themſelves, but with that from the little arteries; for their connection is ſuch with the arteries, that every vein is for the moſt part attended with an artery, over which it lies, and which it touches. Galen ſaith, a vein is ſeldom found without arteries: but no artery is ever found without a vein. Their form is that of a conduit-pipe: their magnitude according to their place: in the liver, and their original, they are great, becauſe they are hot, ſoft, and in perpetual motion, and becauſe all the blood in the body paſſes this way, out of the right into the left ventricle of the heart: in the heart they are great, by reaſon of its heat, and becauſe it is to furniſh the whole body with arterial blood, received in, and ſent out, by continual pulſations. The emulgent veins are great, becauſe of the plenty of blood, and ſeroſities, brought back from the kidneys to the *vena cava:* but, where the ſubſtance of the part is laſting, and the heat ſmall, the veins are leſs, as in the brain, bones, &c. and in all parts towards their ends they are very ſmall, and called capillary veins, being divided minutely, ſprinkled into, and for the moſt part confounded with, the fleſh; by this way the arterial blood is mediately paſſed through the porous fleſh to the veins; and, by the ſame way alſo, blood made of chyle in the liver is infuſed into the little branches of the *vena cava.* The veins and arteries conſpire together, and the veins receive out of the arteries ſpirit and blood; and this is apparent, becauſe, if the veins be quite emptied, the arteries are empty alſo: moreover, by a vein opened in the arm or hand, all the blood in the body may be drawn out; alſo it is neceſſary in reſpect of the circular motion of the blood; and in many places it may be demonſtrated to the eye-ſight, where the conjunctions of the veins with the arteries are viſible. The veins are endowed with feeling both from the nerves that are near them, and from their own membrane, which is one only, where they are inſerted into ſome bowel; otherwiſe they are beſides inveſted with a common membrane, or ſome external thick one, borrowed from the neighbouring parts, when either they are ſuſpended and carried a long way without the bowels and muſcles, or when they reſt upon hard bodies. This happens in the abdomen to the veins and arteries from the *peritonæum*; and in the cheſt from the *pleura*. Their uſe is to receive the blood not ſufficiently elaborated from the arteries, and to return it to the liver and heart, there to be more perfectly concocted. For neither is the venal blood, nor do the veins carry any thing, uſeful for nutrition; but they bring back all the blood to the heart, only by circulation, either mediately by the liver, as the meſaraic veins; or immediately, as the *cava*; and that either from the whole body, from the ſmalleſt branches to the greateſt, by the upper and lower branch, or, from the liver, whether it be there generated, or is derived from the meſaraics and arteries. Hence it appears, that the veins carry and re-carry the blood to the liver; and to this end the valves of the veins do conſpire, which are ſo contrived, that they ſtand all wide open towards the heart, and afford an eaſy paſſage from the ſmalleſt veins to the greateſt, and from thence to the heart; but, from the heart and great veins being ſhut, they ſuffer nothing to go back. The liver ſends only to the heart, the heart only to the lungs and all the arteries. Seeing therefore the blood is thus ſent into all parts, and cannot now be inſtantly repaired by diet, nor return back to the heart by the mitre-faſhioned valves of the *aorta*; nor abide ſtill in the arteries, which are continually moving forward the ſame; nor laſtly, that there can be ſo much ſpent by the parts to be nouriſhed: it neceſſarily follows, that what remains over and above is brought back again to the heart, and enters the veins by circulation. The ſubſtance of the veins is membranous, that they may the more eaſily ſtretch and ſhrink in again: they have only one tunicle which is proper to them, which is thin and rare: it is ſo thin, that through it the blood may be received after the parts are nouriſhed, and ſo be re-carried to the heart, to be there again perfected. The valves of the veins are little foldings, or gates: they are made of moſt thin little membranes in the inner cavities of the veins, and certain particles as it were of the coats of the veins: they are ſituated in the cavities of the veins chiefly of the limbs, viz. of the arms and legs, after the glandules of the arm-holes and groins, beginning preſently after the riſes of the branches, but not in the riſes themſelves; nor is there any of them in the external ſmall veins, becauſe they need them not; nor in the jugulars (except two in the inner orifice, looking from above downwards), becauſe the blood doth hardly deſcend upwards; nor in the *vena cava*, becauſe the valves in the divarications do ſufficiently hinder the regreſs of the blood: they are are alſo found in the emulgents, and the branches of the meſentery, looking towards the *vena cava* and *porta*, as alſo in the milky veins. They all of them look the ſame way, one after another, towards the heart: and are placed at convenient diſtances,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The Arteries of the Human Body

tances, as two, three, four, or five, fingers between each, according to the length of the veſſel. As to their magnitude, they are greater where the plenty and recourſe of the blood is moſt vehement, being in form like the nail on a man's finger, or the horned moon, as the ſigma-ſhaped valves of the heart; and in their ſubſtance exceeding thin, but very compact, leſt they ſhould break by a ſtrong intercourſe of the blood. The uſes of the valves are, 1. To ſtrengthen the veins, whereas the arteries are otherwiſe made ſtrong by the double coats. 2. To ſtop the too violent motion of the blood, leſt it ſhould move violently out of the great veins into the little ones, and tear them. 3. To hinder the blood from regurgitating, or going backwards. Hence the cauſe of a *varix* is apparent, becauſe thick heavy blood long retained againſt the valves makes a dilatation; for without the valves the veins would ſwell uniformly and all of an equal bigneſs, and not in the manner of *varices*.

The chief veins of the whole body are of three kinds: firſt, the *vena cava*; ſecondly *vena porta*; thirdly, *venæ lacteæ*; from which ſeveral other eminent veins ariſe, having particular denominations. The *vena cava* or *magna* is ſo called becauſe of its largeneſs, being the greateſt in the whole body, and the original of all other veins which do not proceed from the vena porta. It takes its beginning from the liver, where, having ſpread many veins through the upper parts thereof, they are about the top collected into one trunk, which is preſently divided into two parts, viz. the upper or aſcending trunk, and the lower or deſcending trunk.

The aſcending trunk of the vena cava, which is the greater, perforates the *diaphragma* or midriff, and is ſpread through the breaſt, neck, head, and arms. It is carried undivided as far as the *jugulum*, and has four branches; viz. 1. *Phrenica vena diaphragmatica*; the midriff veins, on each ſide one, which ſend their branches to the *pericardium* and *diaphragma*. 2. The *vena coronaria*, which is ſometimes double, encompaſſing the baſis of the heart, at whoſe riſe a little valve is placed to hinder the blood returning to the trunk; and with a continued paſſage it is joined to the artery, that it may therefrom receive the blood, which is to return to the *cava*. 3. *Azygos ſine pari*, the ſolitary vein, ſends chief intercoſtal branches to the eight lower ribs ariſing about the fifth vertebra of the breaſt, from the hinder part of the *vena cava*; then, about the fleſhy appendices of the *diaphragma*, it enters the cavity of the *abdomen*, where on the left ſide it is inſerted in the *emulgent* vein; on the right ſide into the trunk of the *cava*. 4. *Subclavii*, or branches of the *cava* by the channel-bones, are divided into only two branches, one on each ſide; each of which is divided into two others, called the *ſubclavii* and *axillaris*. From the *ſubclavii* come forth two ſeveral branches, a ſuperior and inferior. From the ſuperior proceeds, firſt, the *muſcula ſuperior*, ſpread out into the ſkin and muſcles of the hinder part of the neck: ſecondly, the jugular veins, by the ſides of the neck; and they are either external or internal. The external jugular creeps up to the neck, chin, head, and face: under the root of the ear it is divided into internal and external branches: the internal goes to the muſcles of the mouth, fauces, hyoides, &c. from this branch ſpring the veins which are opened under the tongue. The external is propped with kernels, and is divided into two parts: the one is carried to the fore-parts of the face, cheek, and noſe; and in the middle of the forehead, being joined with a branch of the other ſide, it makes the vein of the forehead; the other is carried through the ſides, the temples, and the *occiput*. The internal jugular is called *apoplecta*, and aſcends to the ſide of *trachea* to which it ſends branches: and, going to the baſis of the ſkull in its hinder part, it is divided into two branches: the greater of which is carried backward through the hole of the *os occipitus*, and enters into the cavity of the *dura mater* or thick meninx of the brain: the laſt enters in at the hole or *ſinus* of the third and fourth pair, and is carried alſo to the *dura mater*. From the inferior branch, proceed five veins, the *mammaria*, *intercoſtalis ſuperior*, *mediaſtina*, *cervicalis*, and *muſcula inferior*.

The *vena axillaris*, or arm-vein, when it comes to the arm-pit, is divided into two veins, viz. the *vena cephalica*, or upper branch; and the *vena baſilica*, or lower branch, to which is added the *mediana*. The *cephalica*, or head-vein, is carried in the ſurface of the body between the fleſhy membranes and coat of the muſcles. The *baſilica*, or liver-vein, is placed near a nerve of the third and fourth pair; and therefore ſurgeons in opening of it ought to be careful, leſt they wound it, from whence follow great pain, fever, convulſion, and death. From the *baſilica*, or lower branch, ariſe two veins: firſt, *thoracica ſuperior*, which goes into the muſcles of the cheſt, and into women's breaſts: ſecondly, *thoracica inferior*, which ſometimes grows out of the ſuperior, creeping all over the ſide of the cheſt; its branches are joined by anaſtomoſis with the branches of the *ozygos*, which proceed out of the cheſt. The *baſilica* is divided (under the tendon of the pectoral muſcle) into three branches: the firſt goes with the nerve of the arm, the ſecond is divided into an external, which ſends veins to the thumb, fore and middle fingers; and an internal, running along the middle bone of the cubit, ſending branches along the fingers to the internal muſcle of the hand; the third, called *ſubcutaneus*, at the inner ſwelling of the arm, is the inner branch of the *cephalica*, which conſtitutes in part the *mediana*.

The deſcending trunk of the *vena cava*, which is ſmaller and narrower, proceeds undivided as far as the fourth vertebra of the loins; and ſends forth the four following branches. 1. *Venæ adipoſæ*, which furniſh the coats of the kidneys, and their fat, the ſiniſter being commonly higher than the dexter. 2. The *emulgens*, or emulgent veins, deſcending to the kidneys by a ſhort and crooked paſſage, bringing back the blood, being purified, from the kidneys to the *vena cava.* 3. The *ſpermaticæ*, or ſpermatic veins, the right ariſing a little below the riſe of the emulgent; and the left ariſing from the emulgent, ſeldom from the *cava*, ſometimes from both. 5. *Lumbares*, or loin-veins, ſometimes two, three, or four, which are carried between the four *vertebræ* of the loins. 6. After theſe branches the trunk goes towards the *os ſacrum*, and at the fourth *vertebræ* of the loins it goes under the *aorta*, and is divided into two branches, called *rami ilii* or *iliaci*, becauſe they go over the *os ilii* and *os pubis*, to the thigh: the iliac branches, as ſoon as they have left the cavity of the belly, are called *venæ crurales*, or the leg-veins.

From the *rami ilii* ariſe two veins: firſt, *muſcula ſuperior*, which ſends veins to the *peritoneum*, and muſcles of the loins and belly; ſecondly, *vena ſacra*, which is ſometimes ſingle, ſometimes double, for the marrow of the *os ſacrum*. From thence the *ramus iliacus* is forked out on each ſide into the external greater and internal ſmaller. From the internal ſmaller proceed two veins: firſt, *muſcula media* without, which ſends veins to the muſcles on the outſide of the hip, and ſkin of the buttocks; ſecondly, *hypogaſtrica*, which is ſometimes double, ſending veins to many parts of the *hypogaſtricum*, as to the bladder and its neck, to the penis or yard, to the muſcles of the *inteſtinum rectum*, whence are the *hemorrhoides externæ*, and to the lower ſide and neck of the womb, whence are thoſe veins by which the courſes flow in maidens and women with child; but, when the courſes are naturally voided, they flow from the arteries, as appears from their excellent colour and the common office of the arteries. From the external greater proceed three veins: 1. *Epigaſtrica*, which ſends branches to the peritoneum and muſcles of the abdomen; the principal parts aſcend under the right muſcles to the *mammariæ*, with whom they are often joined about the navel. 2. *Pudenda*, which ſends to the privities in men and women, and goes acroſs to the middle of the *os pubis*. 3. *Muſcula inferior*, which, paſſing over the hip, ſerves the muſcle and ſkin of the part; from hence downwards the iliac branches, as ſoon as they have left the belly, are called crurals.

The crural veins are interwoven with little glandules in the bending of the thigh, and from them proceed ſix branches. 1. The *iſchias* or *iſchiatica minor*, which is oppoſite to the *ſaphæna*, and ſerves the ſkin and muſcles of the hip. 2. *Iſchias* or *iſchiatica major* ſends branches to the hip, and a part of the muſcles of the calf, and then divides itſelf into ten branches, beſtowing a couple upon each toe. 3. *Poplitea*, the ham-vein, made of a double crural branch, mixed together: it runs ſtrait under the ſkin behind, through the midſt of the bending of the ham to the heel, and ſometimes to the ſkin of the external ancle. 4. *Suralis*, a great vein, and is divided into the external and ſmaller and internal and greater; and each of them again into exterior and interior: all which ſend veins to the muſcles of the calves of the legs. Thoſe on the back of the foot, being mixed with the *poplitea*, make the ſame various texture of veins, which are ſeen under the ſkin. 5. *Sepæna*, (ſo termed from its apparency,) or *vena maleoli*, the ancle-vein, is long and large, carried on through the inſide of the thigh, between the ſkin and *membrana carnoſa*, to the knee; and from thence, by the inner part of the leg, it runs to the inner ancle, and to the upper part of the foot and toes. 6. The *muſcula*, a vein ariſing from the trunk or branch hidden among the muſcles: it is double, and remarkable, giving veins to the muſcles of the thigh. As to the veins of both arms and legs, it is to be noted; firſt, that their various branches ſend diverſe twigs outward to the ſkin, called cutaneous veins: ſecondly, that even the grand branches are variouſly diſtributed in every perſon, being ſeldom in one man as they are in another: and that the right arms or legs rarely agree with the left. In opening the veins of the foot, you may indifferently make choice of any, ſeeing they are all derived from one and and the ſame trunk.

The *vena porta*, or gate-vein, is the next great vein to the cava; its prime original is the *vena umbilicalis*, or navel-vein, the firſt of all the veins ariſing from ſeed, and that by which the child is nouriſhed in the womb; afterwards it riſes out of the hollow part of the liver, where with many roots it is inſerted. The trunk, before it is divided into lower branches, ſends two ſmall veins to the gall-bladder, called *venæ cyſticæ*; and another vein to the ſtomach, called *gaſtrica dextra*, which is divided about the lower orifice of the ſtomach. Afterwards the trunk is divided into two eminent lower branches, viz. the ſplenetic, and the meſenteric. *Ramus ſpleneticus* goes into the ſpleen. Before it is divided, it ſends from itſelf two upper branches to the ſtomach, firſt *gaſtrica ſiniſtra*, or *major*, (the largeſt of all the ſtomach veins,) which afterwards conſtitute the *coronaria*; then it ſends lower branches, one to the omentum or caul, and one to the pancreas. Afterwards the trunk of the *ramus ſplenicus* is divided into the upper and lower branches: the former produces the *vas breve* and other little branches carried into the ſpleen: the latter produce, 1. *Gaſtroepiploica ſiniſtra*, which runs out upon the bottom of the ſtomach, and gives many branches both to the ſtomach itſelf and to the omentum. 2. *Vena epiplois*, which runs out upon the ſame parts; and a multitude of other ſmall branches, which are ſent up and down all over the ſpleen. The meſenteric branches of the *vena porta*, called *ramus dexter*, whoſe principal part goes into the meſentery, ſends forth two veins; one to the middle of the *duodenum*, from whence certain capillary twigs go through the pancreas and omentum upwards; and another to the right ſide of the ſtomach and omentum. Afterwards the trunk of the *ramus meſentericus* is divided into two parts, the right and the left. The right-hand branch is two-fold: 1. *Gaſtroepiploica dextra*, which runs to the bottom of the ſtomach, and joins with the *gaſtroepiploica ſiniſtra*, ſending branches through the omentum and ſtomach. 2. The right meſenteric branch itſelf, which is divided into fourteen nameleſs little branches, and thoſe again into innumerable other little veins, which are called meſeraic veins, and are diſperſed into the *jejunum*, *ileon*, *ſæcum*, and part of the *colon*. The left-hand meſenteric branch, firſt, ſends out the *vena hæmorrhoidalis interna*, which diffuſes itſelf through the meſentery, and ſends forth branches to the ſpleen, womb, and *inteſtinum rectum*, which is the internal *hæmorrhoidal* vein: hence appears a communion between the womb and the *hæmorrhoidal* of the *anus*, and that poſſibly the courſes or terms may be conveyed alſo this way. Afterwards this left meſenteric branch ſpreads itſelf abroad into the left and centrical part of the meſentery, whence come *vena cæcalis*, which goes to the blind gut; and *ramus meſocolicus*, which from the left ſide of the ſtomach goes to the *colon*. *Vena cava* firſt receives the cruder blood from the arteries, and remits it to the heart: the *vena porta* takes the blood not ſufficiently elaborated from the arteries, and carries it to the liver, for the more perfect concoction and ſeparation of the choler.

The hæmorrhoidal veins are ſituate in the fundament or *inteſtinum rectum*, and are of two kinds, either internal or external. The internal proceed from the *vena porta*; the external from the *vena cava*, with which the hæmorrhoidal arteries are aſſociated, and through which the humours to be evacuated are carried off. In their evacuation, the internal have a flux, not very plentiful, attended with a great deal of pain; the external emit a flux ſo large as may ſometimes cauſe death, or ſome grievous diſeaſe, but without any pain at all. The internal deſcend alone, not aſſociated with arteries; however, the arteries are either hidden, or they depend on arteries not far off: the external deſcend with arteries to the muſcles of the anus; and therefore the external hæmorrhoids may more properly be called *vaſa hæmorrhoidalia*, whereby the arteries are included with the veins.

The *venæ lacteæ*, or milky veins, are peculiar paſſages, much differing from the meſeraics: they are called *lacteæ* from milk, which they reſemble in whiteneſs, ſoftneſs, and fatneſs. Their ſituation is in the abdomen, where they are for the moſt part accompanied with fat, to cheriſh the natural heat for the attraction and concoction of the chylus. The great lactean vein, lying between the *arteria aorta* and the vertebræ of the loins, covered with fat, runs upward, and, above the heart, aſcends by the gullet to the left ſubclavian vein, where it ends in one, two, or three, branches: here a moſt thin valve occurs at the very end of the vein, looking inwardly, that the chyle might not run back again, or run farther into the arm: out of this ſubclavial they deſcend by the aſcending trunk of the *vena cava* into the right ventricle of the heart, that there, by the help of the heat and the natural faculty, they may be changed into blood. Their ſubſtance is the ſame with that of a vein itſelf, which it reſembles in all things, the milky juice only excepted: having but a ſingle membrane, though in the meſentery they receive from it another external coat. They grow continually one to another, of an unequal magnitude; being for the moſt part ſmall, leſt the thick and unprofitable parts of the chyle ſhould go into them; or leſt they ſhould make a diſtribution thereof too ſuddenly: they are alſo infinite in number, diſperſed through the liver, meſentery, pancreas, and bowels. They are colder and moiſter than the ordinary veins; very thin, exceeding ſubtil, (where they enter into the body of the liver,) tender, ſmooth outwardly, rare, but rough by reaſon of the fibres within them. Their action and uſe are, 1. To carry or convey the chyle to the liver. 2. To digeſt and better concoct the chyle, to make it more fit to receive the form of blood in the liver: for the chyle is not changed at all till it comes into the liver, where it grows red by little and little. 3. To ſhew a ready way for the diſtribution of the chyle: that the blood is made in the liver, not in the veins; and that the ſucking of the veins is no cauſe of hunger, becauſe none are carried to the ſtomach. To ſhew the cauſes of ſome diſeaſes, before obſcure: as, of the chylous flux; of hypochondriac melancholy; of an atrophia, or pining away of the body for want of nouriſhment, by reaſon of the glandules of the meſentery being filled with ſchirrhous ſwellings; of intermitting agues quartered in the *meſaræum, &c.*

The beſt method of tracing the general courſe of the veins, is to begin with the main trunks, or primary veins, and end with their ramifications and capillary extremities, according to their ſeveral diviſions and ſubdiviſions. In this manner they are traced in the annexed plate, where fig. 1. repreſents the veins as attached to the body; fig. 2, the veins abſtracted from the body; and fig. 3, the pulmonary vein: of each of which the following is an explanation.

1. Vena cava, (fig 1 and 2)
2. Cava deſcendens
3. Cava aſcendens
4. Vena azygos
5. 5. Subclavian veins
6. 6. Jugular veins external
7. 7. Jugular veins internal
8. The intercoſtals
9. 9. The mammary veins
10. 10. Auxillary veins
11. 11. Cephalic veins
12. 12. Baſilic veins
13. 13. Vena mediana
14. 14. Diaphragmatic, hepatic, and renal or emulgent, veins
15. 15. Spermatic and iliac veins
16. 16. Hypogaſtric, epigaſtric, and crural, veins.

Fig. 3. repreſents the pulmonary vein in the time of expiration; *a* being its trunk, cut cloſe to the baſe of the heart; *b*, *b*, its diviſions to the right and left lobe of the lungs; *c*, the canalis arterioſus; *d*, *d*, the extremities of the arteries freed from the veſſicles of the lungs, and their inoſculations with the pulmonary veins.

## OF THE ARTERIES.

AN ARTERY is a ſimilar, ſpermatic, membranous, long, round, hollow, part, a common pipe-like organ, conſiſting of a double coat proceeding from the heart, joined every where to the veins, by the aſſiſtance of many oſculations, containing and carrying the nutritious blood and vital ſpirits to all parts of the body. It is called *arteria*, from its containing and preſerving air or ſpirit, and therefore the ancients, as, Hippocrates, Plato, and Ariſtotle, call the wind-pipe *arteria magna:* but Galen makes a diſtinction, and calls the wind-pipe *aſpera arteria*, the rough artery, and thoſe of which we here ſpeak *arteriæ leves*, the ſmooth arteries, which Ariſtotle calls ſometimes *venam aortam*, and ſometimes ſimply *aorta*. Their matter is a cold clammy part of the ſeed: the original of their diſpenſation is the heart, and they proceed out of the left ventricle thereof, and not the middle (as Ariſtotle would have it); and therefore the aorta, or *arteria magna*, proceeds particularly from the left ventricle; but the *pulmoniac arteria* (falſely called by the ancients *vena arterioſa)* from the right ventricle. Their uſe is, firſt, to carry the vital blood and ſpirits, made in the heart, to all parts of the body: ſecondly, to breed animal ſpirits in the noble ventricle of the marrow, (to wit) the brain: thirdly, for the nouriſhment of the body, and all its parts, which are only nouriſhed by the arterial blood, and not by the venal: fourthly, to carry the excrements of the body and blood, either to the outward parts of the body, or to the kidneys, or meſentery or womb, or hæmorrhoidal veins, &c. The arteries flow only by pulſation: whereby, firſt, the heat of the parts is cooled and tempered: ſecondly, the nouriſhing arterial blood is caſt continually into the ſmalleſt and moſt remote arteries: which is proved by the continual pulſation of the heart, which drives the blood into the greater arteries: thirdly, the ſtagnation of the venal blood is hereby prevented: for the pulſation keeps it always in motion, by forcibly caſting the more than neceſſary arterial blood for nouriſhment into the veins, which convey it to the heart for ſupply, leſt it ſhould be deſtitute of its ſanguine humour by its continual expulſion. The cauſe of the pulſation, or pulſe, is, according to Bartholine, from both the blood filling, and the faculty of the arteries directing. But I judge the cauſe to be from ſpirit, wind, air, or breath: for, if you blow with a reed or pipe being put into water, it will make an apparent pulſation, or bubbling, much more if the water was contained in long narrow veſſels with valves, that it might not return back; but, if you ſuck with the pipe, then it runs ſmoothly, without pulſation or leaping: therefore the blood in the arteries flows with pulſation, from the expulſive faculty of the heart, cauſed by its ſpirits; but it flows in the veins ſmoothly, or without pulſation, becauſe it is ſucked or drawn back again by the attractive faculty, cauſed by want of ſpirits, or blood, or by their being waſted by the heart's perpetual expulſation. The ſituation of the arteries is deep, always under the veins both in the external and internal parts, the abdomen, a little below the kidneys, only excepted; for, after that the vena cava and aorta deſcending from the diaphragma have paſſed the region of the kidneys, the cava hides itſelf under the aorta, through all that region, till they paſs out of the abdomen; and then the artery again hides itſelf under the cava. The magnitude of the aorta is very great, but the deſcendant part is greater than the aſcendant, becauſe the number of the internal parts is greater than of the external. The number of arteries is leſs than of veins, becauſe the paſſage of the blood is quick through the arteries, but ſlow through the veins; but there are more arteries than we can well diſcern, becauſe the capillary arteries are very much like the veins. Their ſubſtance is membranous, ſo that they can be both diſtended and contracted more than the veins; and it conſiſts of two peculiar tunicles; the exterior is thin, ſoft, and rare, like the tunicle of a vein; the interior is compact, hard, and very thick, five times thicker than the tunicle of the veins; that thereby the arteries may be ſtrong to endure their perpetual motion, and to keep in their thin and ſpirituous blood, which would ſoon vaniſh and fly away.

The *arteria magna*, or aorta, the great and chiefeſt artery, comes from the left ventricle of the heart, with a wide orifice; it has a double tunicle, the innermoſt of which is five times thicker, leſt, by continual pulſation about the hard and ſolid parts, it might incur an incurable rupture. From the ventricle of the heart, before it perforates the *pericardium*, it ſends forth to the heart itſelf the coronary artery, which compaſſes the baſis of the heart, ſometimes ſingle, ſometimes double. Afterwards coming through the *pericardium* or heart-bag, it is divided into two trunks, the ſmaller aſcending and the greater deſcending.

The ſmaller or aſcending trunk of the aorta, or *arteria magna*, reſting upon the wind-pipe, provides for all the parts about the heart, and is divided into two ſubclavial branches, the latter riſing lower, and going more obliquely to the arm; the others, before they go out of the thorax, (for afterwards they are called *axillares,*) produce the *intercoſtales ſuperiores,* proper to three or four upper ribs; from their upper part ariſe four arteries: 1. *mammariæ,* which go to the paps; 2. *cervicales,* which go to the muſcles of the neck; 3. *arteria muſculæ*, which are approximate to the jugular veins; 4. the *carotides*, or ſleep-arteries, which are two, unequal, and aſcend upwards to the head by the ſides of the wind-pipe, being knit to the internal jugulars: when they come to the *fauces*, before they enter the ſcull, they give branches to the larynx and tongue, and then they divide themſelves into the *carotis externa* and *carotis interna*. The *carotis externa*, being the ſmaller, furniſhes the cheeks and muſcles of the face: at the root of the ears it is divided into two branches: the firſt is ſent to the hinder part of the ear, whence ariſe two other branches, which go to the lower jaw, and the root of all the lower teeth; the ſecond goes to the temples, the forehead, and muſcles of the face. The *carotis interna* at the ſaddle of the *os ſphænoides*, under the *dura mater*, makes the *reta mirabile*, then paſſes through the *dura mater*, and ſends forth two branches: the firſt, which is the ſmaller, goes with the optic nerve to the eyes: the ſecond, which is the greater, aſcends to the ſide of the *glandula pituitaria*, and is diſtributed through the *pia mater* and the ſubſtance of the brain.

When the ſubclavial branches have left the breaſt or thorax, they are called *axillares*, and carry nouriſhment to the outward part of the breaſt, and to the whole arm. From the axillares ariſe the *thoracica ſuperior*, or upper breaſt-artery; *thoracica inferior*, or lower breaſt-artery; the *ſcapularis*, or ſhoulder-blade artery. From the upper part of the axillares ariſes the *humeraria*: the remainder goes from the axillary on each ſide to the arm; where it is carried along through the arm, deſcending between the muſcle, with a vein and nerve of the arm. Under the bending of the elbow, it is divided into two branches, the upper and the lower, which accompany the branches of the *vena cava*, and are called by the ſame names. The upper goes right forwards through the middle to the wriſt, where the pulſe is commonly felt: from thence, proceeding under the ring-ſhaped ligament, it beſtows branches upon the thumb, fore-finger, and middle-finger. The lower branch runs through the *ulna* to the wriſt, and ſends twigs to the ring or little finger, and ſo proceeds to the wriſt beneath, where the pulſe may alſo be felt, eſpecially in ſuch as are lean, and have a ſtrong pulſe; but the beating of the pulſe is much better felt in the upper branch, that being leſs covered or hid by the tendon.

The deſcending trunk of the aorta ſends out branches from itſelf unto the thorax, abdomen, and thighs. From the thorax it ſends forth two arteries: 1. the *intercoſtales inferiores*, which runs to the intervals of the eight lower ribs, and the neighbouring muſcles; 2. the *phrenica*, which ſends to the diaphragma or midriff, and *pericardium* or heart-bag. The reſt of the trunk pierces through the clift of the *ſeptum*, and ſends ramifications through the abdomen; ſome of which go along with branches of the *vena porta*; others the branches of the *vena cava.*

Afterwards the *arteria magna*, or aorta, haſtens the beginning of the os ſacrum, where it goes above the *vena cava*, and no longer under, leſt, by reaſon of its continual motion, it ſhould be hurt againſt ſome bone; and here it is called the iliac artery. It is divided like the *vena cava* into two iliac trunks, and each trunk into an inner and leſs branch, and into an outward and greater, which go to the thigh. Theſe trunks ſend out on each ſide ſix branches: 1. the *ſacra*, immediately after the bipartition: 2. *muſcula inferior:* 3. *hypogaſtrica:* 4. *umbilicalis:* which laſt three come from the inner trunk: 5. *epigaſtrica:* 6. *pudenda:* which two laſt come from the exterior trunk.

The reſt of the artery (out of the abdomen), being carried to the thigh, changes its name, and there makes the crural arteries; from whence on each ſide ſpring branches above and under the ham. Above the ham, from the outward part of the trunk: 1. *muſcula cruralis externa*, to the foremoſt muſcles of the thighs, from the inner; 2. *muſcula cruralis interna*, which go to the inner muſcles of the thigh; and this is mixed at the knee with a little twig of the *hypogaſtrica.* Under the ham ariſe, 1. *popliteus*, which goes to the hinder muſcle of the thigh: 2. *ſuralis*, which is divided into, firſt, *tibicus exterior*; ſecond, *poſterior altus*; third, *poſterior humilis*, for the muſcles of the leg: 3. the laſt of them is ſent to the foot and toes, all along accompanied with the veins, from which they borrow their names. To enter into a more minute detail of their ſubdiviſions would be uſeleſs; the arteries being all delineated on the annexed plate, with references to their ſeveral names, as follows:

1. Aorta, cut from its origin, at the left ventricle of the heart. 2. 2. Trunks of the coronal arteries. 3. The three ſemilunar valves. 4. 4. Subclavian arteries. 5. 5. Carotid arteries. 6. 6. Vertebral arteries. 7. 7. Arteries of the tongue, &c. 8. 8. Temporal arteries. 11. 11. Occipital arteries. 13. 13. Contorſions of the carotides. 15. 15. Ophthalmic arteries. 16. 16. Arteries of the cerebellum. 18. 18. Ramifications of the arteries within the ſcull. 19. 19. Arteries of the larynx. 21. 21. Mammery arteries. 23. 24. 25. 26. Arteries of the arm. 27. Arteries of the hand and fingers. 28. 28. Deſcending trunk of the aorta. 29. Bronchial artery. 31. 31. Intercoſtal arteries. 32. Trunk of the cœliac artery. 33. 33. 33. Hepatic arteries. 34. Arteria cyſtica. 35. 36. 37. 38. 39. Arteries of the ſtomach, pylorus, and epiplois. 40. 40. Phrenic arteries. 41. Trunk of the ſplenic artery. 43. 44. 45. 46. 47. Meſenteric arteries. 49. 49. Emulgent arteries. 51. 51. Spermatic arteries. 52. Arteria ſacra. 53. 53. Iliac arteries. 54. 54. 58. 58. Iliaci externi. 55. 55.

59. 59. Iliaci interni. 56. 56. Umbilical arteries. 57. 57. Epigaſtric arteries. 60. 62. Arteries of the penis and pudendum. 61. 61. Arteries of the bladder. 69. 69. 70. 70. Crural arteries. 72. Arteries of the leg. 73. Arteries of the foot.

## OF THE NERVES.

A NERVE or ſinew is a ſimilar, ſpermatic, membranous, long, and white, hollow, part: a common organ, ſerving to carry the animal ſpirits into all parts of the body for ſenſe and motion. Its efficient cauſe is the *vis nervifica*, the nerve-making power or faculty: its matter is a cold and clammy part of the ſeed. The original diſpenſation is from the *medulla oblongata*, partly as it is within the ſkull, and partly as it is in the back-bone. Their end and uſe is to carry the animal faculty with the animal ſpirits from the brain, for the ſenſe and motion of the whole body. And therefore the nerves inſerted into the parts give either ſenſe alone, or both ſenſe and motion, there being neither without help of a nerve: for, a nerve being cut, the ſenſe and motion of the part is loſt. But this ſenſe or motion is according to the parts where they are diſſeminated, becauſe the nerves of themſelves are neither ſenſitive nor motive; if they are inſerted into muſcles, (the organs of motion,) they are termed *nervi motorii*, motive nerves: if into the inſtrument of ſenſe, *nervi ſentientia*, the ſenſitive. Their ſituation is, for ſecurity, deeper than that of an artery: their magnitude is various, according to the nature of the organ, and dignity of the action. Thoſe of the eyes are great, becauſe of the action: thoſe of the limbs, very great and thick, becauſe of their diſtance and magnitude: thoſe of the ſenſory parts are in a middle proportion; thoſe of the neareſt parts, as in the muſcles of the face, are the ſmalleſt of all. The number of the nerves are taken from their conjugations or pairs, and are ſo called, from their coupling or being double, for that they ſprout out on both ſides, except the laſt or loweſt, proceeding from the ſpinal marrow. The form or figure of the nerve is long, round, and ſmooth, like conduit pipes: ſolid to appearance, having no ſuch hollowneſs as the veins and arteries have; but they have cavities or pores, for the carrying off the animal ſpirits, though not perceptible to the eyes. The ſubſtance of all the nerves is compoſed of many nervous fibres, which grow mutually together by little membranes; and this ſubſtance is thought to be threefold: 1. the internal white and marrowiſh, from the marrow of the brain, but more compact and thickened: 2. an inner coat, from the *pia mater*; 3. an outward coat, from the *dura mater*; but theſe things ſenſe cannot diſcover. The ſubſtance of the nerves is alſo either harder or ſofter: the harder are ſuch as either go a great way, or through ſome hard body, or by a crooked way, or are ordained for motion, which requires ſtrength;

and all parts which have voluntary motion have hard nerves, for that which is hard is fitted to act, that which is ſoft to ſuffer: the ſofter nerves are ſuch as are the ſhorteſt, and which belong to the organs of the ſenſes, as the ſeeing, taſting, hearing, and ſmelling, which laſt are the ſofteſt of all; and theſe require ſoft nerves, as being the objects of ſuffering. As their uſe is to carry the animal ſpirits and faculties into all parts for ſenſe and motion; ſo, if they be obſtructed in their original, or beginning, or totally, they both periſh, and an apoplexy is cauſed: if the obſtruction be but in part, then one part is deprived of ſenſe and motion: if they are cut aſunder, the motion of the part into which they are inſerted is loſt: moreover, the nerves diffuſe animal light into the parts, by which they are directed in their operations. Hence it appears how neceſſary it is for a phyſician to know the nerves, their original, differences, and diſtribution, that he may underſtand to what part of the *ſpina dorſi* topic medicaments are to be applied, when ſenſe or motion is hurt in the face, neck, arms, hands, muſcles of the belly, womb, bladder, anus, yard, thighs, legs, or feet. Moreover the cauſe of the gout ſeems chiefly to be the extravaſating of the nervous juice; for the nervous juice, being over-heated or rarified by too much heat, cannot be contained in its proper place; but ſeeking more room flies out of the ſolid capacity of the nerve (its proper domicil) into the hollow of the nerve, the channel of the animal ſpirits, thereby interfering with them, cauſing an extenſion of the nerve, oppoſition, and conſequently pain. In the annexed plate all the nerves are delineated, agreeable to the following deſcription and arrangement.

The nerves of the brain are nine pair. 1. The olfactory pair, (fig. 2.) *aa*, which, paſſing through the os cribroſum, are ſpread over the membrane of the noſtrils. 2. The optic pair, *bb*, which by their expanſion form the retina of the eye. 3. The motary pair of the eyes, *cc*, each of which is divided, near the orbit, into ſix parts, or branches; of which, in human ſubjects, the firſt branch goes to the elevator palpebræ; the ſecond, to the elevator of the eye; the third, to the depreſſor; the fourth, to the adducent; the fifth to the inferior oblique muſcle; and the ſixth into the tunics of the eye; but, in other animals, they are divided much otherwiſe. 4. The pathetic pair, *dd*, which are very ſmall, and run to the trochlear muſcle of the eye. 5. The guſtatory pair, which are very large, and divided within the cranium into three branches, *ff*, immediately under the dura mater: of theſe the firſt branch, called the ophthalmic, runs to various parts of and about the eye, the eyelids, the muſcles of the forehead and noſe, and the integuments of the face. The ſecond branch may be called the ſuperior maxillary one, as being finally diſtributed through all parts of the upper jaw, the lips, noſe, palate, uvula, gums, teeth: a branch of it alſo runs to the ear, and, joining with a branch of the ſeventh pair, forms the chorda tympani. The third branch may be called the maxillaris inferior, as being diſtributed over the ſeveral parts of the lower jaw, the tongue, and other parts of the mouth; whence the whole pair of nerves has obtained the name of *par guſtatorium*; though a great part of them ſerves to very different purpoſes, and is carried to parts that have nothing to do with taſting. 6. The abducent pair, *gg*, except a branch for the formation of the intercoſtal nerve, is wholly carried to the abducent muſcle of the eye; whence its name. The intercoſtal nerve (fig. 1. and 2), *iii*, *ll*, *m*, &c. is formed either of ramifications of the two preceding nerves, or only of thoſe of the ſixth pair. It makes its way out of the cranium by the paſſage of the internal carotid, and deſcends near the eighth pair through the neck; and thence through the breaſt and abdomen, even to the pelvis; and, in its way, makes various plexuſes and ganglia, and ſends branches to almoſt all the parts contained in the breaſt and abdomen. 7. The ruditory pair, *hh*, ariſe with two trunks; the one of which is called the portio dura, or hard portion; the other the portio mollis, or ſoft portion. The laſt enters the foramen of the os petroſum, and thence through various little apertures gets into the labyrinth of the ear, where it is expanded over all its parts, and conſtitutes the primary organ of hearing. The harder portion, paſſing the aquæduct of Fallopius, ſends back one branch into the cavity of the cranium; it alſo ſends off another branch, which helps to form the *chorda tympani*; and others to the muſcles of the tympanum. The reſt of this pair goes to the external ear; the pericranium, the muſcles of the os hyoides, the lips, the eye-lids, and the parotids. 8. The par vagum, *kkk*, with the *acceſſorius* of Willis, paſs out near the lateral ſinuſes of the dura mater; and, deſcending through the neck and thorax to the abdomen, ſend out branches by the way to the larynx, the pharynx, the heart, the lungs, and eſpecially to the ſtomach. It alſo ſends off from the upper part of the thorax large branches, which are variouſly implicated in the neck, thorax, and abdomen, with the linguals, the cervicals, and the intercoſtals. 9. The lingual pair go immediately to the tongue, and are called by ſome the motory nerves of the tongue; but, by others, with more juſtice, the guſtatory nerves.

We are to obſerve, ſays Heiſter, that the pair of nerves, which the generality of writers have called the tenth pair of the head, are, for many unanſwerable reaſons, to be properly called the firſt pair of nerves of the neck. Of the nerves which ariſe from the ſpinal marrow there are properly thirty-two pair. Thoſe of the neck are no leſs than eight pair; and from them there are innumerable branches diſtributed through the muſcles of the head, the neck, the ſcapula, and the humerus,

merus, marked A, B, C, D, &c. to O O, the eighth and laſt pair: from the third, fourth, and fifth, pair, are formed the nerves of the diaphragm; and the ſixth, ſeventh, and eighth, pair, together with P P, the firſt pair of the back, form the ſix robuſt nerves of the arm and hands. To this diviſion is the acceſſory ſpinal nerve of Willis to be referred, which ariſes about the origin of the third or fourth pair.

The nerves of the back are twelve pair, marked P P, QQ, R, S, &c. to Z, and α, β, &c. which, beſides the branch they give to the brachial nerves, run entirely in the ſame furrow along the courſe of the ribs, and are diſperſed over the pleura, the intercoſtal, pectoral, and abdominal, muſcles, the breaſt, and other parts of the thorax.

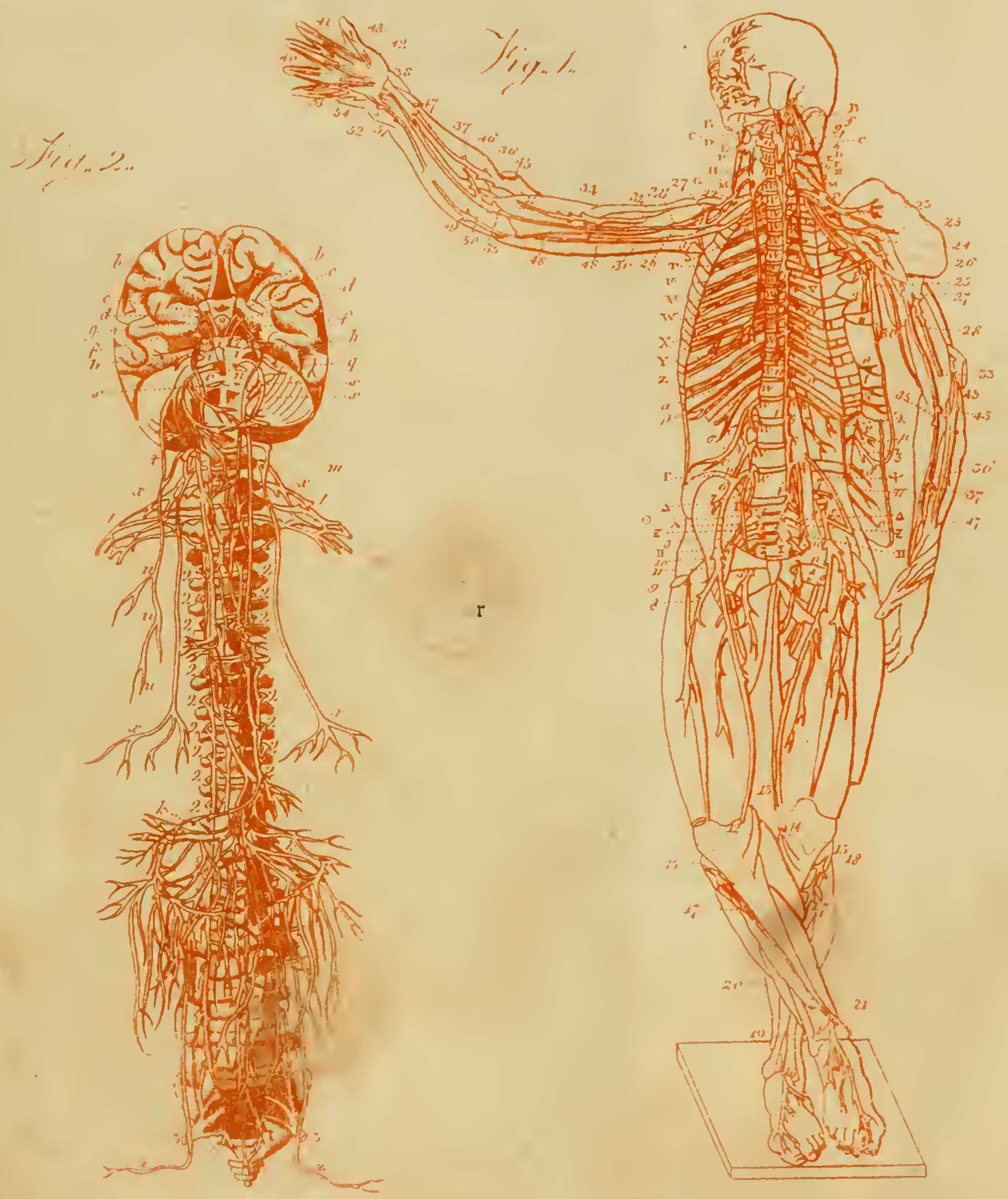
The nerves of the loins are five pair, marked τ, φ, ϖ, Γ, Θ; with their branches υ, χ, ψ, &c. Theſe are in general diſperſed over the loins, the peritonæum, and the integuments and muſcles of the abdomen: and, beſides this, their firſt pair often gives, on each ſide, a branch of the diaphragm. The ſecond pair, after inoſculating with the branches of the firſt, third, and fourth, pair, forms the crural nerves, 6 6, 7 7, 8 8, &c. which are diſtributed over the anterior part of the thigh: and, in the ſame manner, a branch is formed of the conjunctions of the ſecond, third, and fourth, pair, which paſſeth through the great foramen of the os pubis to the ſcrotum, the teſticles, and the adjoining parts. The fourth and fifth pair of the nerves of the loins, joining with the firſt, ſecond, third, and fourth, pair of the os ſacrum, compoſe the nerve called iſchiatic, which is the largeſt in the body, being marked 3 3, in fig. 2. it deſcends along the hinder part of the thigh, and its branches are diſtributed over the whole leg, the foot, and toes; being marked 15, 17, 18, &c.

The nerves of the ſacrum form five or ſix pair, though not always determinately and regularly ſo: they paſs through the foramina of this bone, and the ſuperior ones of them, as already obſerved, compoſe the iſchiatic nerve; and what remains is diſperſed, in a multitude of ramifications, over the parts contained in the pelvis, the inteſtinum rectum, the bladder, the parts of generation, and the parts adjacent. They are marked, in the figure, Λ, Ξ, Π, Σ, &c.

We ſhall only add, that 1, 1, fig. 2. repreſent the brachial nerves; 2, 2, &c. the communications of the vertebral nerves with the intercoſtals; *l l*, remarkable communications between the phrenic nerves and the intercoſtals; *t*, *u*, *u*, &c. the acceſſory nerve of the eighth pair; *x x*, the phrenic nerves; and *z z*, the nerves which go to the teſtes, uterus, &c.

## OF THE MUSCLES.

A MUSCLE is a ſimilar, ſpermatic, ſanguinous, membranous, fleſhy, fibrous, part, and the inſtrument of voluntary or free motion. It is compoſed of fibres, for he intention of the motion: of fleſh, for the ſubſtance; of tendons, which perform the



The Nerves of the Human Body

the action: of arteries, by which it is nouriſhed; of veins, which carry back the ſuperfluous nouriſhment; of nerves, which give ſenſe, and convey the motive faculty to the brain; of membranes, which encompaſs and keep the muſcles together; of fat, which moiſtens them and keeps them from being dried by too much motion. The fibres and fleſh are only extended according to the ſtraight poſition of the fibres; the tendon is in the beginning and end; the arteries and veins run through the ſubſtance of the muſcle; the nerve, as ſoon as it is entered into the ſubſtance, is diſperſed into a great number of twigs, which end in it, and become inconſpicuous; the membrane is proper to the muſcle only, and ſprings either from the tendons, or is framed by nature in the firſt conformation of the parts; the fat lies in void ſpaces to prevent a vacuum or emptineſs. The action of a muſcle is voluntary or free motion. This action or motion is three-fold: firſt, when the muſcle is contracted towards its head within itſelf, thereby relaxing the oppoſite muſcle: ſecondly, when the motion is tonic, ſo that being contracted it remains ſo; theſe two motions are primary, *per ſe*, and not accidental: thirdly, when (after contraction) it is relaxed, or reſtored to its former poſition, which motion is accidental, and proceeds from another; and therefore muſcles are always placed one againſt another as antagoniſts. The manner of this action or motion varies according to the variety of parts; for, in the throat, it is ſwallowing; in the arm, bending and ſtretching forth; in the anus, expulſion and retention; &c. This motion is voluntary or free; for we can haſten or ſlacken, make or ſtop, this motion, as we pleaſe: but there are ſome ſingular muſcles, as of the inſide of the ear, the midriff, the muſcles of the cheſt, and of the eye-lids, whoſe motion is partly voluntary, partly natural, becauſe they often perform their actions when we have no thought or will thereto. Thoſe muſcles which only perform continual or ſtrong motions, which are all ſuch as are appointed for moving the bones, have tendons; but thoſe which move other parts, as the tongue, lips, forehead, face, bladder, anus, &c. ſeldom have any; for the muſcles move themſelves only, as thoſe of the anus and bladder; or they move with themſelves and the ſkin alſo, as in the lips, forehead, and face; or they move a bone, and ſuch, by reaſon of the ſtrong motion, require tendons. The diverſity of this motion comes from the diverſity of the ſituation: ſo a ſtraight muſcle has a ſtraight motion; a tranſverſe, a tranſverſe motion; an oblique, an oblique motion; and that which compaſſes a part has an orbicular motion, as the ſphincters. The efficient cauſe of theſe actions, or motions, is the ſoul of the creature, inclined thereto by the appetite or will: now the ſoul uſes three inſtruments to perform the action: firſt, the brain, to receive the charge; ſecondly, the nerve, to carry it to the muſcle; thirdly, the muſcle, to perform the action itſelf. The differences of muſcles are various: firſt, from their ſubſtance; ſome are fleſhy, as ſeveral of the tongue and larynx; ſome membranous, as the conſtrictores of the noſe; ſome partly fleſhy, partly nervous, as the temporal muſcles: ſecondly, from their quantity; the greateſt of all is the firſt of thoſe which extend over the breaſt; for it aſcends from the end of the os ſacrum, to the firſt vertebra of the thorax: the leaſt of all is the internal muſcle of the ear: thirdly, from their ſituation, fourthly, from their figure, or form, or number, as the muſcle deltoides; the muſcle bicipites, having two heads; alſo ſome have two tails: fifthly, from their beginnings; ſome proceed from bones, ſome from cartilages, as thoſe of the larynx; ſome from tendons, as the lumbricales; ſixthly, from the action; ſome move by ſympathy, as the *fraterni*, or *congeneres*; or by antipathy, as the *antagoniſtæ*; ſome move themſelves only, as the ſphincters; ſome move other parts; ſome have only one motion, as moſt of the muſcles; ſome have more than one, as the maſſeter and trapeſius; ſome are *flexores*, ſome *extenſores*, ſome *rotatores*, ſome *ſupinatores*. As to its being a ſimilar part, it is only ſaid to be ſo according to ſenſe or appearance; and that it is ſuch, it appears, foraſmuch as it forms not of itſelf alone the moſt ſimple organical part, as a finger or toe, &c. but they take into their compoſition, with a muſcle, ſeveral other ſimilar parts, as bones, cartilages, membranes, ſkin, &c. Moreover a truly diſſimilar or organical part is only found in itſelf, not in other parts: but a muſcle, as it is but a part of all diſſimilar parts, ſo it goes univerſally or every where to the conſtitution of all organical parts, which even the moſt ſimple organical parts do not.

The muſcles of the head are either proper, from which comes the primary motion upon the firſt vertebra, to which it is immediately and cloſely joined, being bent forward and backward, or turned round; and they are in number eighteen ſingle, or nine pair: or common, which are thoſe, which together with the head move the neck, and theſe are the muſcles of the neck, of which in their proper place. The firſt pair is called *ſplenius* or *ſplenicus*, or *triangularis*; it proceeds from the firſt vertebra of the breaſt, is ſpread out on each ſide upon the vertebra, reaching to the third vertebra of the neck, from whence it is carried to the middle of the occiput; its uſe is to draw the head directly backwards: but, if only one of the muſcles act, the motion is circular to one ſide. The ſecond pair is called *complexus* or *trigeminus*: it is a large muſcle aſſiſting the other. It has divers beginnings at the ſeventh vertebra of the neck, and at the firſt, third, and fourth, of the breaſt, and is after a different manner terminated in the *occuput*. The third pair is called *ſub ſecundo*, and inſerted into the hindermoſt root of the *proceſſus mammillaris*: its uſe is lightly to bring the head backwards; or backwards to one ſide, if but one muſcle acts. The fourth pair, called *recti majores*, are ſmall, fleſhy, and lean, and ſpring from the edge of the ſecond ſpondil or vertebra of the neck, ending in the middle of the occiput. The fifth pair, called *recti minores*, lie concealed under the former, proceeding from the back part of the firſt ſpondil, or vertebra of the neck, and is inſerted into the occiput; its uſe is the ſame with the third and fourth pair. The ſixth pair is called *obliqui majores*; it lies beneath and ſprings from the proceſs of the firſt vertebra, and ends in the occiput, by the outſide of the *recti*. The ſeventh pair, is called *obliqui minores*; it ariſes from the ſecond vertebra of the neck, is inſerted into the tranſverſe proceſs of the firſt vertebra, and terminates in the occiput: the uſe of theſe two oblique pair is to bring the head about to the ſides. The eighth pair, called *maſtoides*, is placed in the forepart; they ariſe for the moſt part double, long, and round, in the forepart of the neck, from the upper part of the *ſternum* or breaſt-bone, and midſt of the *clavicula*, and is obliquely inſerted into the mamillary proceſs, which it embraces; its uſe is to turn the head. The ninth pair, called *fallopiani*, lies under the throat in the forepart of the neck, and near the firſt pair of the neck; it ariſes nervous from the ligaments of the vertebra of the neck, and is inſerted into the baſis of the head, which it turns in like manner as the former.

The muſcles of the forehead have their original from the upper parts of the forehead and ſkull, near the coronal ſuture, and, being ſpread out upon the bone thereof, they end at the eye-brows, that they might lift them up, being ſevered in the midſt of the forehead, right above the noſe; but knit at the ſides to the temporal muſcles.

The muſcles of the occiput, or hind part of the head, are rather membranes, which draw backwards the ſkin of the head, in ſuch perſons as have the ſkin moveable.

The two eye-lids are moved by four muſcles: the firſt is the *frontalis*, which is ſtraight, belonging to the upper eye-lid, to lift up the brow. The ſecond is the *muſculus ciliaris primus*, which compaſſes about each of the eye-lids. The third is the *muſculus ciliaris ſecundus*, which is drawn out under the eye-lids, and ariſing from the circumference of the *orbita*, or ſocket of the eye; the uſe of theſe *ciliaris* is to ſhut the eye-lids. The fourth is *orbicularis major*; it is of a finger's breadth, encompaſſes the ſurface of the *orbita*, or ſocket, and being placed under each eye-lid, and reaching as far as the eye-brow, it cloſely ſhuts the eye-lids, by lifting up the lower, and drawing down the eye-brow.

The eye hath ſix muſcles, of which four are ſtraight, and two oblique or circular; they are all ſeated within the cavity of the ſkull, and accompany the optic nerve. The firſt muſcle is called *attollens* or *ſuperbus*; it is the upper and thicker, and is the lifter up of the eye, being the proud or ſcornful muſcle. The ſecond is called *deprimens* (the depreſſer) and *muſculus humilis*; it is placed oppoſite to th other, and draws the eyes downwards towards the cheeks. The third is called *adducens*, the drawer to; alſo *lectorius*, the reading muſcle, becauſe it moves the eye inwards towards the noſe. The fourth is called *abducens*, the drawer from, becauſe it draws the eye to the outward corner; it is alſo termed the *indignatorius*, as being the muſcle of indignation. All theſe four muſcles have the ſame original, progreſs, and end; the beginning of them all is acute, near the hole where the optic nerve enters into the ſocket of the eye, from the membrane whereof they ariſe; their belly is fleſhy and round, and their end a very ſmall tendon: by all theſe four acting together, the eye is kept from ſtirring. The fifth muſcle, called *obliquus major*, or *ſuperior*, ariſes from a common beginning with the firſt four, is carried right out to the inner corner of the eye, where it paſſes out and aſcends in a right angle to the upper ſide of the cornea: this muſcle is the ſmalleſt of all, and has the longeſt tendon, by which it wheels the eye about unto the inner corner. The ſixth muſcle, called *obliquus internus minor et inferior*, is a ſhort, lean, round, and oblique, muſcle, ſeated between the eyes and tendons of the ſecond and third muſcle; it ſprings from the lower and almoſt outward part of the orbit of the eye, and, aſcending by the outward corner to the upper part of the eye, is inſerted into the *cornea* by the region of the *iris*. It whirls about the eye obliquely downwards to its external or outward corner.

The muſcles of the external part of the ear are four pair: of the internal part, two pair; but in moſt people the ears are immoveable, becauſe of the ſmallneſs of the muſcles and little need of their motion. Of the four firſt muſcles, three are common with other parts; the fourth is proper to itſelf. The firſt muſcle is called *deprimens*, common to the ear and each lip, and is a part of the firſt muſcle which moves the cheeks and ſkin of the face, and is called *quadratus*, the ſquare muſcle, very thin and broad, and is implanted into the root of the ear, and pulls it down. The ſecond is called *antrorſum ducens*, or the drawer forwards; it is a part of the frontal muſcle, which is carried above the temporal muſcle, and is inſerted into the upper part of the ear. The third muſcle is called *retrorſum ducens*, or *abducens ad poſteriora*, the drawer back, and ariſes from a part of the occipital muſcle, above the *proceſſus mammillaris*, with a narrow beginning, from whence, growing broader, it is carried downwards tranſverſely, and inſerted into the hinder part of the ear. The fourth muſcle is called *triparitus*, or *attolens*, the lifter up; it ariſes from the *proceſſus mammillaris*, and being broad it grows narrow by little and little, till at laſt it ends in a tendon, and is inſerted into the root of the ear. This is the only proper muſcle to the ear, and is rather three-fold, becauſe it has three inſertions, though all ſpring from one place. The fifth muſcle which belongs to the internal part of the ear is called *externus*; it is very ſmall, ſpringing from the ſkin and membrane which cover the paſſage of the ear; then, becoming fleſhy, it paſſeth by a ſhort tendon to the outward part of the *tympanum*, and is inſerted about the centre of it. The ſixth muſcle which belongs to the internal part of the ear, is called *internus*, it is ſmall, and placed within the *os petroſum*, with a double tendon, one part of which is fixed to the higher proceſs of the *malleolus* or hammer, the other to its neck. It ariſes from the baſis of the wedge-like bone, then becomes ſomewhat fleſhy, afterwards narrower, and ends in a double tendon. Its uſe is to draw the head of the hammer obliquely inward.

The noſe has eight muſcles, or four pair, eſpecially in large-noſed people, but they are ſmall, becauſe the motion of the noſe is little. The firſt pair are called *openers* or wideners; they are fleſhy, ariſe from the cheek-bone near the muſcle of the lips and ſides of the noſe; they are inſerted partly into a part of the upper lip, partly into the lower wing, and end in the top of the noſe. The ſecond pair are called *erectores* or *aperientes*, openers: they are moſtly triangular, and with a ſharp and fleſhy beginning ſpring from the ſuture of the forehead by the *foramen lachrymale*, under the tear-glandule, and, cleaving to the bone, are outwardly inſerted and carried to the *pinnæ*, wings, or ſides of the noſe. The third pair are called *conſtringentes*, or pulling together: they are little, ariſe fleſhy about the roots of the *pinnæ*, are carried along tranſverſely, and inſerted into the corners of the wings: their uſe is a little to ſhut the noſtrils. The fourth pair are called *deprimentes:* theſe are exceeding firm, and membranous, lie hid under the coat of the noſtrils in the inner part: they ariſe from the extremity of the *os naſi*, and are implanted into the *pinnæ* or wings; their uſe is to depreſs the noſe, or pull it downwards.

The muſcles common to both cheeks and lips are, 1. *Zigomaticus*, or *quadratus detrahens:* it is a thin muſcle like a membrane, interlaced with fleſhy fibres. It ariſes from the *vertebræ* of the neck, in the outward ſide, and aſcending up by the oblique fibres to the face is implanted in the chin, and terminated in the meeting of the two lips: this pair draws the lips backwards. 2. *Buccinator*, the trumpeter, or cheek driver or mover: this pair lieth under the former in the upper part of it; and makes up all that part of the cheek which is blown up when a trumpet is ſounded. It ariſes from the top of the gums near the fartheſt grinders, and ends in each lip. The muſcles proper to the lips, are either proper to each lip, or common to both. The upper lip has two pair of muſcles proper to it; the lower has but one. The firſt pair is *attolens ſurſum trahens*, which draws the lip upwards: it ſprings from the corner between the eyes and the noſe, and is inſerted into the ſubſtance of the upper lip. The ſecond pair, called *deorſum movens* ariſes from the upper jaw-bone, juſt in the cavity of the cheeks, under the ſocket of the eye, thin, but broad and fleſhy. The third pair, called *deorſum trahens*, proper to the lower lip only, ariſes from the middle of the chin, with a broad beginning, and aſcends directly to the middle of the lower lip, which it moves upwards. The muſcle alſo common or belonging to both lips are alſo three pair: Firſt, *Oblique ſurſum trahens*, that which obliquely draws upwards. The ſecond pair common is *oblique deorſum trahens*, or *deprimens*, moving the lips obliquely downwards. The third common to both lips is circular, encompaſſing and conſtituting the whole mouth, making the proper ſubſtance of the lips: by help whereof, the mouth is purſed up, or drawn together.

The muſcles of the lower jaw are in number twelve, viz. ſix pair, being ſix on either ſide. 1. *Temporalis*, *crotaphites*, the temporal muſcle, ſo called from its ſituation, becauſe it poſſeſſes the cavities of the temples: it is the greateſt of all the jaw-muſcles, being very firm and ſtrong, it runs along under the *os zigoma*, and is by a very ſtrong and nervous tendon inſerted into the ſharp proceſs of the jaw-bone. Its uſe is forcibly to pull up the lower jaw, and to ſhut the mouth. 2. *Maſſeter*, the chewing-muſcle, or firſt chewer: it is placed in the cheeks, and ariſes from a double head. It is inſerted into the inferior jaw-bone, by a very broad and ſtrong connection. 3. *Alare externum*, the outward wing muſcle. It ariſes from the *os ſphœnoides* and the external *proceſſus alaris*, with a beginning partly nervous and partly fleſhy, and is inſerted into the neck of the lower jaw-bone, and in the inner ſeat of the head. Its uſe is to move forwards and thruſt out. 4. *Maſſeter internus*, the other chewer, is thick and ſhort, and is implanted into the inner and hinder part of the jaw, with a broad and ſtrong tendon. Its uſe is to aſſiſt the temporal muſcle. 5. *Muſculus latus*, the double-bellied muſcle, or broad muſcle. It is nervous in the middle, and fleſhy at the ends, and is inſerted into the chin, under the bending of the jaw, faſtened to a ligament, leſt it ſhould go too far back. Its uſe is to draw the jaw downwards to open the mouth. 6. *Muſculus latus*, the broad or broadeſt muſcle. It ariſes from the upper part of the *ſternum*, the *clavicula*, and ſhoulder-point, and, covering the whole neck and face, it cleaves firmly to the inferior jaw, and is fixed in the middle of the chin. The four laſt muſcles draw the jaw upwards, and are exceeding ſtrong; the laſt two only draw it downwards, becauſe it would be apt to depreſs itſelf.

The muſcles of the *os hyoides* or tongue-bone, which is foundation of the tongue, are in number four pair. 1. *Sterno-hyoides*: it ariſes from the inner but upper part of the *ſternum*, and reſting upon the windpipe lies concealed in the fore part under the ſkin. 2. *Genio-hyoides*, which ariſes from the inner part of the chin, fleſhy,

broad,

broad, ſhort, and is inſerted into the middle or hollow of the *os hyoïdes*. 3. *Stylo-cerato-hyoides*: it ariſes from the root of the *proceſſus ſtyloides*, being lean, round, and ſeated under the chin. 4. *Ceraca hyoides*: it ariſes at the firſt, ſmall, lean, and long, from the upper ſide of the *ſcapula*, becomes fleſhy about the neck, and, paſſing under the levator of the ſhoulder-blade, is inſerted into the point of the *hyoides*. This pair is long, and has two bellies, being extenuated in the middle like a tendon.

The muſcles moving the tongue are in number five pair: 1. *Styloglоſſum*, ariſing from the outſide of the *appendix ſtyloides*, and ending with tranſverſe fibres, in both ſides of the tongue; it moves the tongue inwards; and by reaſon of the interwoven fibres, they lift the tongue upwards, if they act both together; or upwards only on one ſide, if only one acts. 2. *Myloglоſſum*, ariſing from the ſides of the lower jaw, at the roots of the grinding teeth, and ending under the baſis of the tongue in the ligament: when both act, they move the tongue to the palate and upper teeth; but when one acts the tongue is moved obliquely upwards. 3. *Genioglоſſum*, ariſing inwardly from the middle of the chin, and terminating almoſt in the middle of the tongue inwardly. Its uſe is to thruſt the tongue out of the mouth, and alſo to draw it in again, ſo that it ſeems to perform contrary actions. 4. *Hypſilogloſſum*, ariſing fleſhy out of the upper and middle region of the *os hyoides*, runs along according to the length of the tongue; and is terminated into the middle of it: this pair draws the tongue inward. 5. *Ceratogloſſum*, which ariſes from the upper horns of the *hyoides*, and is obliquely inſerted into the ſides of the tongue, near the root thereof. It moves the tongue downward toward the inward parts, when both act; but to the right or left ſide, if only one be contracted.

The muſcles of the *larynx*, or wind-pipe, are either common or proper; the common are two pair, *ſternothyroides* and *hyothyroides*. 1. *Sternothyroides* ariſes from the inner ſide of the *ſternum*, runs along by the *larynx*, and is inſerted beneath into the ſides of the *ſcutiformis*, or ſhield-faſtened griſtle. This ſtraightens the chink of the *larynx*, by drawing down the *ſcutiformis*. *Hyothyroides*, ariſes from the lower ſide of the *os hyoides*, being broad and fleſhy, and touches the *ſcutiformis*, and is inſerted into its baſis. It widens the chink, by lifting up the *ſcutiformis*. Theſe common muſcles are implanted into the *larynx*; but do not ariſe therefrom. The proper muſcles are five pair: 1. *Thyrocrycoides*, ariſes from the loweſt part of the *ſcutiformis*, and ends at the *annularis*, and is inſerted into the lateral parts of the *thyroides*. 2. *Crycothyroides* riſes from the hinder ſide of the *annularis*, fleſhy; and is inſerted into the lower part of the *glottalis*, with a nervous end, opening the *larynx* by drawing aſunder the two griſtles called *arytenoides*. 3. *Crycoarythenoides laterale*, ſprings above from the ſide of the *annularis*, and is implanted at the ſides of the *glottalis* into the joint, and opens the *larynx* with the ſame oblique motion of the griſtles. 4. *Thyroarytenoides*, or *glottoides*; this helps the former, and, ſpringing from the inner and forepart of the *thyroides*, is terminated into the lateral part or ſides of the *glottalis*, or *arytenoides*, which ſhuts the *larynx* by a ſtraight paſſage; if this pair is inflamed in a quinſey, it is mortal, becauſe it exactly ſhuts the chink. 5. *Arytenoides* is a round muſcle, compaſſing the ewer-like cartilage: it ariſes from the hinder line of the *guttalis*, and, being carried along with tranſverſe fibres, is inſerted into the ſides thereof.

The *uvula* has two pair of muſcles, two on either ſide, viz. an external and internal pair. 1. *Ptery-ſtaphylinus externus* riſes from the upper jaw, and under the laſt grinding tooth, ends in a ſmall tendon, which paſſes through a chink on the upper ſide of the *pterygoides*. 2. *Ptery-ſtaphylinus internus* proceeds from the lower part of the internal wing of the *pterigoides*, and aſcending according to the longitude of the wing is inſerted in like manner into the *uvula*.

The *pharynx* or throat, which is the beginning of the *œſophagus* or gullet, has ſeven muſcles belonging to it, viz. three pair, and one without a fellow. 1. *Sphæropharingæus*, which ſprings from the ſharp point of the *ſphænoides*, and, paſſing downwards, is inſerted into the lateral parts of the *pharynx*, or throat, to pull up the mouth of the ſtomach, that it may receive the meat. 2. *Chephalepharyngæus*, which ſprings from the part where the head is joined to the neck, and, running down, is ſpread about the *pharynx* or *œſophagus*, ſeeming to make the membrane of it. 3. *Stylopharingæus*, which ſprings from the *ſtyloides proceſs*, and is inſerted into the ſides of the *pharynx*, both to dilate and amplify it. 4. *Œſophagus*, the muſcle without a fellow, being only a ſpincter-like muſcle, encompaſſing the gullet. It ſprings from one ſide of the *thyroides*, and circularly encompaſſing the hinder part of the *pharynx* is tied to both the ſides of the *thyroides*, to contract the mouth of the ſtomach as the *ſpincter* doth the *anus*.

The muſcles of the neck are four pair. The two firſt pair, to wit, *muſculus longus* and *muſculus ſcalenus*, bend the neck; the two latter pair, viz. *muſculus tranſverſalis* and *muſculus ſpinatus*, extend it. 1. *Longus*, lies under the *œſophagus* or gullet, ſprings from the fifth *vertebra* of the breaſt, with a beginning fleſhy and ſharp, aſcends laterally, annexed to all the bodies of the *vertebræ*, terminating in the extuberant proceſs of the *vertebræ*, with an acute tendon, and ſometimes is inſerted into the *occiput*, near its great hole; 2. *ſcalenus*, it ariſes fleſhy, at the ſide of the neck, from the firſt rib, and is inſerted inwardly, by oblique fibres, into all the tranſverſe proceſſes of the *vertebræ* of the neck; through this pair, the veins and arteries enter into the arm. 3. *Tranſverſalis*, ariſing from the tranſverſe eminences or proceſſes of the ſix uppermoſt *vertebra* of the breaſt, and is inſerted into all the external tranſverſe eminences of the neck. 4. *Spinatus*, ariſing from the roots of the ſeven uppermoſt *vertebræ* of the breaſt, five of the neck, and is inſerted into the ſpine or point of the ſecond *vertebra* of the neck.

The muſcles of the breaſt or *thorax* are in number ſixteen, viz. eight on either ſide, of which the firſt five widen or lift up the breaſt: the laſt three contract it; to theſe add, as a ninth, one peculiar muſcle, called *diaphragma* or the midriff. 1. *Subclavius*, it ariſes from the inner part of the *clavicula*, is of a fleſhy ſubſtance, and is drawn upwards and outwards, and inſerted into the upper part of the firſt rib. 2. *Serratus major*, the greater ſaw-like muſcle; it reaches from the inner baſis of the *ſcapula* unto ſix and ſometimes ſeven of the ribs. 3. *Serratus poſticus ſuperior*, which grows out of the ſharp points or ſpines of the three lower *vertebræ* of the neck, and the firſt of the back, and inſerted into the three upper ribs, and ſometimes into the fourth. 4. *Muſculi intercoſtales externi*, theſe are eleven pair in number, but perform the office of one muſcle only; are interwoven, totally fleſhy, and ariſe from the lower parts of the upper ribs, and, deſcending obliquely towards the back parts, are inſerted into the upper parts of the lower ribs, terminating on the cartilages. 5. *Triangularis*, it is ſmall and thin in lean perſons, ſprings out of the inner and lower part of the *ſternum*, and is inſerted into the cartilages of the lower ribs, as far as the third or fourth of the baſtard ribs. 6. *Sacrolumbus*, which ſprings from the *os ſacrum*, and the ſpinous proceſſes of the loins, and is inſerted into the upper ribs near their roots, beſtowing upon each rib a double tendon, one external, the other internal. 7. *Serratus poſticus inferior*, it is oppoſite to the ſuperior; and both of them, by a broad and membranous tendon, ſo grow together, that they ſerve inſtead of a band to keep the hinder muſcle of the back-bone together: it grows out of the ſpines or proceſſes of the three loweſt *vertebræ* of the back, and firſt of the loins, is terminated into three or four of the lower ribs. 8. *Muſculi intercoſtales interni*, theſe are the ſame in number and place with the *externi*, and lie directly under them; they are carried obliquely from the nether rib to the uppermoſt, and have fibres contrary to thoſe of the external, croſſwiſe interſected. 9. *Diaphragma* or midriff, called alſo *precordia*, becauſe it is ſtretched out before the heart; and *phrenes*, becauſe, being affected, the mind and ſenſes are diſturbed, by reaſon of the conſent it has with the brain: ſo that, when the midriff is inflamed, a phrenzy is cauſed. It is one in number, an inſtrument of free motion, and an admirable kind of muſcle, both in regard of its compoſition and continual action or motion, ſerving alſo as a wall of partition to ſever the vital and natural parts one from another. The head of it is in the nervous centre, but the tail in the circumference of the lower ſhort ribs, from whence it ariſes, and through which it is obliquely drawn about, as far as to the *vertebra* of the loins. It has a double membrane for ſtrength ſake: the upper is from the *pleura*, to which the *pericardium* is firmly faſtened, and ſometimes alſo the lobes of the lungs; the lower is from the *peritonæum*.

The muſcles of the back and loins are four pair; the firſt pair is *quadratum*, adhering to the tranſverſe proceſſes of the *vertebra* of the loins, ariſing inwardly from the *os ilium* and *os ſacrum*, broad and fleſhy. Its uſe is to bend the *vertebra* of the loins. 2. *Longiſſimum*, ariſes with an acute and ſtrong tendon from the extremity of the *os ſacrum*, the *vertebra* of the loins, and *os ilii*, having the ſame beginning with the *ſacrolumbus*; to the *vertebra* of the back it gives tendons like claſps, terminating ſometimes in the firſt *vertebra* of the breaſt, and ſometimes at the *mamillary proceſſes*. 3. *Sacrum* ariſes from the *os ſacrum* behind, being fleſhy, and terminates in the twelfth *vertebra* of the breaſt. 4. *Semiſpinatum*, which ariſes where the former ends, and embracing all the ſpines of the *vertebra* of the breaſt, and giving them tendons, it terminates in the ſpine of the firſt *vertebra* of the breaſt. The uſes of theſe three laſt are to extend the breaſt, loins, and their *vertebræ*: if all the eight muſcles act, they hold the back ſtraight, and as it were uphold a man.

The muſcles of the abdomen or belly cover the lower belly, and have their names partly from their ſituation and riſe, and partly from their figure. They are in number ten, or five pair, whoſe principal uſes are to impel the internal parts, and to move the *os ſacrum* and *ilium*: or to make a proper retention and compreſſion of the parts in the belly: to provoke voiding the excrements, or help the expulſive faculty of the womb and bladder. Their temperament is hot and moiſt, to cheriſh natural heat and concoction: they are moderately thick, to defend the parts, and, when very fleſhy, they add much to the comelineſs of the body. The firſt pair is *obliquus deſcendens*, ſo called by reaſon of its fibres, which deſcend obliquely. It riſes in the breaſt from the lower part of the ſixth, ſeventh, and eighth, ribs, and terminates in the white line by a broad tendon. 2. *Obliquus aſcendens* is ſituated next the former, in a triangular figure, riſing fleſhy from the rib of the *os ilii*, but membranous from the ſharp proceſſes of the *vertebræ* of the loins, and from the ſharp points of the *os ſacrum*: it aſcends obliquely, and terminates in a double tendon embracing the *muſculus rectus* like a ſheath; but the duplicity appears only above the navel, for below it it is united inſeparably. 3. *Muſculus rectus*; its original is fleſhy, from the *ſternum*, on each ſide the ſword-like cartilage, and from the cartilages of the four baſtard ribs: it has three nervous inſertions which ſtrengthen it; and veins which run along the longitude of it, viz. the *mammariæ deſcendentes* from the breaſts, and the *epigaſtricæ aſcendentes* from the womb in women, but from the *vena cava* in men; which meet about the middle of this muſcle, extending as far as the region of the navel, and are there terminated. Theſe two veins are joined by *anaſtomaſis*, from whence the conſent of the womb with the breaſts is cauſed; which, being handled, excites women to venery. 4. *Muſculi piramidales*, the pyramidal muſcles, lie upon the extremities of the *muſculi recti*, and riſe with a fleſhy beginning from the external ſhare bone, where all the nerves enter; and, growing narrower by degrees, they terminate with a ſharp point in the tendon of the tranſverſe muſcle. Their office is to compreſs the bladder, and therefore they ſend their tendons, between the *muſculi recti*, into that part of the *peritonæum* which includes the bladder. 5. *Muſculi tranſverſi*, the croſs muſcle, ariſing from a certain ligament which ſprings out of the *os ſacrum*; and, terminating by a broad membranous tendon in the *linea alba*, ſtick extremely faſt to the *peritonæum* every where except about the *pubis*. Its proper uſe is to compreſs the colon.

The muſcles of the *os ilium* and *ſacrum* are moved forward in coition by the *muſculi recti* and *obliqui deſcendentes* of the belly, the breaſt reſting and the thigh remaining unmoved. They are moved backwards by the *muſculus ſacer* and *ſemiſpinatus*, which ariſe from the *vertebra* of the back, &c.

The muſcles of the *penis* or yard are two pair; the firſt pair is called *erector*, or *director*; the latter, *accelerator*. 1. *Erector*, or *penem erigens*, is a ſhort and thick pair, ariſing nervous under the beginning of the yard, from the innermoſt bunching out of the *iſchium*, and, being knit unto the ligament of the yard, growing fleſhy, it reaches ſide-ways as far as the middle of the body thereof: their uſes are to erect and keep up the yard in coition. 2. *Muſculi acceleratores*, or *par urethram dilatans*, are longer than the former, but thinner or leaner; they ariſe both from the *ſphincter* of the *anus* and internal tuberoſity of the *iſchium* or huckle-bone, are ſpread out under the *urethra*, carried beneath, and inſerted into the ſides thereof, about its middle: its uſe is to dilate or widen the *urethra* both for the paſſage of the urine and for the ſeed in coition. Theſe are the muſcles where an appertion is commonly made in cutting for the ſtone.

The muſcles of the *clitoris*, proper to female ſubjects, are like thoſe in a man's yard, the ſame in number, and to the ſame intent. The two uppermoſt, being round, riſe from the internal knob of the *iſchium*, and, being placed by the lateral ligaments, cauſe the erection of it. The two lower are broad and ſmooth, and proceed from the *ſphincter* of the *anus*.

The muſcles of the teſticles are either proper or common. The proper muſcles are only the pair called *cremaſter*, ariſing from a ſtrong ligament in the *os pubis*, where the tranſverſe muſcles of the belly end, of which they ſeem to be parts; they paſs through the production of the *peritonæum,* which they compaſs nearly about, and paſs with the ſpermatic veſſels to the ſtones; they are ſhorter in women than in men, and are placed above the production of the *peritonæum:* their uſe is to ſuſtain or hold up the ſtones. The common muſcle is the membrane of the *ſcrotum* called *dartos,* being a continuation of the fleſhy membrane; and this muſculous membrane ſuſpends both teſticles.

The bladder has but one muſcle, called *ſphincter,* which encompaſſes the neck of the bladder, in an orbicular form, as alſo are the fibres. It is fleſhy, drawn back over the *proſtatæ* or auxillary teſticles; it ejaculates the ſeed in coition. In women it reaches to the hole by which the urine paſſes, and it ſeems to form it.

The muſcles of the *anus,* or fundament, are either the *ſphincter* or the *levatores;* the *ſphincter* muſcle, called *ani conſtrictor,* the ſhutter or contractor, is fleſhy, (and without the ſtraight gut two inches broad;) ariſes from the lower *vertebra* of the *os ſacrum;* and is encompaſſed with the tranſverſe fibres all along the *anus:* it is faſtened on the fore part to the paſſage of the bladder by fibrous couplings; to the yard, to whoſe muſcles it gives beginning; and to the neck of the womb: on the hinder part it is inſerted into the *coccyx* or crupper-bone, and at the ſides it is faſtened into the *os coxæ.* The *muſculi levatores* are four, or two pair; one pair of which are broad, and one narrow. *Muſculi levatores lati,* ariſe from the *os ſacrum* and *os ilium,* and are inſerted into the larger *ſphincter. Muſculi levatores tenues,* the narrow muſcles: of which the foremoſt ariſes from the tranſverſe ligament; the hindermoſt from the *coccyx,* whereunto they are terminated.

The muſcles of the ſhoulder-blade, or *ſcapula,* are four, according to the number of its motions, viz. forward and backward, upward and downward: 1. *ſerratus minor,* the ſmaller ſaw-like muſcle, ariſing from the four upper ribs, and aſcending obliquely upwards, with an end partly fleſhy, partly tendinous, and is inſerted into the *ſcapula;* its uſe is to draw forwards into the breaſt: 2. *trapezius, cucullares,* ariſes fleſhy from the hinder part of the head towards the ear, from whence it deſcends to the eighth *vertebra* of the breaſt, and, from thence growing ſmall by degrees, it is inſerted into the back-bone, top of the ſhoulder, and *clavicula;* it moves the *ſcapula* variouſly, according to its oblique fibres: 3. *rhomboides,* or diamond-like muſcle, ſituate under the *cucularis,* thin and broad, ariſe from the three lower *vertebræ* of the neck and the three upper *vertebræ* of the breaſt, and in the ſame breadth are inſerted into the external baſis of the *ſcapula;* it draws back a little obliquely upwards: 4. *levator muſculus patientiæ,* ariſes from the tranſverſe apophyſes of the ſecond, third, and fourth, *vertebra* of the neck, and is inſerted into the higher and lower corners of the *ſcapula;* its uſe is to lift the ſhoulder up.

The arm is variouſly moved, therefore has it many muſcles, to wit, nine in number. 1. *Pectoralis* is great and fleſhy, ariſing from the whole breaſt-bone, and griſtle thereof, the *ſternum*, and above half the *clavicula*, and is by a ſharp tendon inſerted into the ſhoulder-bone, between the *deltoides* and the *biceps*. 2. *Deltoides*, from likeneſs to the letter Δ, ſprings from the middle of the *clavicula*, and the *acromium*, and is inſerted into the middle of the arm or ſhoulder bone. 3. *Latiſſimus*, ſprings from the *vertebræ* of the loins, and of nine *vertebræ* of the back, and is inſerted into a part of the arm, between the pectoral and round muſcle, with a ſtrong, ſhort, and broad, tendon: this with its fellow of the other arm covers almoſt the whole back: it is called *ani ſcalptor*, becauſe it draws the arm backwards and downwards. 4. *Rotundus major* is fleſhy, thicker, and rounder, than the reſt, obliquely ſeated behind under the *axilla*, and ariſes from the lower rib of the *ſcapula*, which, aſcending a little with its tendon, ſhort, broad, and ſtrong, is inſerted (with the pectoral muſcle) into the middle of the arm. 5. *Rotundus minor*, is ſhort, round, quite fleſhy, and ariſes with a ſharp beginning out of the lower corner of the *ſcapula*, terminating with an acute end in that ligament, with which the head of the ſhoulder is involved. 9. *Infra ſpinatus*, ariſes in the middle between the ſmaller round muſcle and the ſpina, covers the whole external bunching part of the *ſcapula*; then, becoming more narrow, it is inſerted into the neck of the arm, or ſhoulder. 7. *Supraſpinatus* is fleſhy, and ariſes out of the ſpine of the upper rib of the *ſcapula*, then, being conveyed under the *acromium*, it is inſerted with a broad and ſtrong tendon into the neck of the arm, at the ligament of the joint. 8. *Subſcapularis*, or *immerſus*, is very fleſhy, and paſſes between the *ſcapula* and ribs, poſſeſſing the hollow and inward part of the ſhoulder-blade, then is carried out, and inſerted, with a broad tendon, internally into the ſecond ligament of the *humerus*. *Coracoides*, is inſerted into the inner part of the ſhoulder, about the middle of the arm, by the tendon of the *deltoides*. Its beginning is nervous and ſhort: and its belly has an hole in it (whence its name) to give a paſſage to the nerves running to the muſcles of the cubit.

The cubit or elbow has two bones, the *ulna* and *radius*: the *ulna* ſerves for flexion and extenſion; but the *radius* for pronation and ſupination. The *ulna* is bended by two muſcles, the *biceps* and *brachieus internus*, and extended by four, viz. *longus*, *brevis*, *cubitalis*, and *brachieus externus*. 1. *Biceps*, ariſes from the *ſcapula*, round and tendinous, which is inſerted into the inner part of the *radius*. 2. *Brachieus internus* is placed beneath the *biceps*, ſmaller than the former, and ariſing from the middle of the *os brachii*, and is inſerted before into the common beginning of the *radius* and *ulna*. 3. *Longus*, or *extendens primus*, ariſes from the lower rib of the ſhoulder-blade, near the neck, with a double beginning, and is terminated in the elbow. 4. *Brevis extendens ſecundus*, ſprings from the hinder neck of the arm, mixed with the foregoing muſcle, clothes the *humeri*, and terminates on the outſide of the elbow. 5. *Anconeus extendens tertius*, it is ſituate in the bending of the cubit, on the hinder ſide; it ariſes out of the lower and hinder part of the arm, between the ulna and radius, and is inſerted by a nervous tendon into the ſide of the cubit. 6. *Brachieus externus*, being ſpread out upon the outſide of the brachium: it is a fleſhy lump, made of the two former, and is placed under them, being inſerted into the ſame place.

The radius has four muſcles, two of which are *pronatores* or pullers down; and two *ſupinatores* or pullers up. 1. *Pronator ſuperior* ariſes from the inner apophyſis of the arm, by a ſtrong and fleſhy beginning, and ends with a membranous tendon, obliquely running into the middle of the radius. 2. *Pronator inferior*, from the lower part of the cubit ulna, unto the lower part of the radius, and is there inſerted. 3. *Supinator longior*, from the top of the brachium, above the external knob, and, being drawn out upon the radius, is inſerted on the inſide of the lower epiphyſis thereof. 4. *Supinator brevior*, ſprings from the outward apophyſis of the arm, fleſhy within, membranous without, and is inſerted nearly into the middle of the radius.

To the wriſt belong four muſcles, of which the firſt two bend it and the latter two extend it. 1. *Cubiteus internus*, the firſt bender, ariſes from the internal apophyſis of the arm, and, being ſtretched over the elbow, is inſerted with a thick tendon into the fourth bone of the wriſt. 2. *Radieus internus*, the ſecond bender, is drawn along the radius, ariſes from the beginning with the former, and terminates in the firſt bone of the metacarpium, under the fore-finger. 3. *Radieus externus*, ariſes with a broad beginning, from the external apophyſis of the arm, and terminates in a double tendon at the firſt and ſecond bones of the os metacarpi. 4. *Cubiteus externus*, ariſes from the ſame beginning, through the length of the cubit; when it comes to the wriſt, it becomes a ſtrong, round, tendon, and is inſerted into the upper part of the fourth bone of the metacordus, under the little finger.

In the palm or hollow of the hand are two muſcles, called *palmares*, of which the one is long, the other ſhort. 1. *Palmaris longus*, ariſes from the inward apophyſis of the arm, with a round and tendinous beginning, is ſpread into the hollow of the hand, cleaving exceeding faſt to the ſkin, where, under the ſkin, in the hollow of the palm, is a broad tendon, giving exquiſite ſenſe to that part; it is terminated into the firſt intervals between the joints of the fingers. 2. *Palmaris brevis*, is a certain four-ſquare fleſhy ſubſtance, ſpringing from the membrana carnoſa, from whence it is carried under the former muſcle, to the middle of the palm of the hand, and is inſerted into the outſide of that tendon, which bears the little finger from the reſt.

The thumb is bent by two muſcles; extended by two; and drawn ſide-ways by ſix. *Flexor primus*, ariſing from the upper part of the *radius*, is inſerted into one of the joints. 2. *Flexor ſecundus*, ariſing from the wriſt-bone, is inſerted into the middle of the thumb, and lies wholly under the former. 3. *Extenſor primus*, ariſing out of the upper and outward ſide of the cubit, runs along the *radius*, is carried beyond the wriſt, and is inſerted into the firſt and ſecond joint of the thumb, by a double and ſometimes triple tendon. 4. *Extenſor alter*, ariſes from the ſame part of the cubit, but lower near the wriſt, and is inſerted into the third joint of the thumb. 5. *Adducens primus*, is joined unto and ſeated beneath the *thenar*, ariſing out of the three lower bones of the *metacarpium*, and is inſerted into the ſecond joint of the thumb; this draws the thumb to the fore-finger. 6. *Adducens ſecundus*, the ſecond drawer of the thumb to the fore-finger; it ariſes out of the *metacarpium*, and is inſerted as the other. 7. *Adducens tertius*, drawing alſo the thumb of the fore-finger, ariſes out of the external ſide of the *metacarpium*, which ſuſtains the thumb, and is inſerted into the firſt joint. 8. *Abducens primus*, or *thenar*, the firſt drawer away, ariſes from the inſide of the wriſt, and is inſerted into the ſecond joint of the thumb, to draw it from the fingers. 9, 10. *Abducens ſecundus* and *tertius*, they ariſe and are inſerted as the former, to draw the thumb alſo from the fore-finger.

The fingers are bent, extended, and moved laterally, for the performance of which are ſeventeen muſcles; they are as follows: *Sublimis* or *perforatus*, it ariſes from the inner *apophyſis* of the arm, it is divided into four tendons incloſed in a ligament, as it were in a ring, which are inſerted into the ſecond jointing of the fingers, a cleft being firſt made, through which the tendons of the following muſcles paſs. *Profundus* or *perforans*, is ſpread out under the former, and is inſerted through the clifts of the former tendons, into the third jointings of the fingers; it ariſes from the upper parts of the *ulna* or *radius* under the joint, and is divided into four tendons. *Hypothenar digitur minimi, proprius auricularis*, the muſcle proper to the little finger, it ariſes in the hollow of the hand, from the third and fourth wriſt-bones of the ſecond rank, and is inſerted externally into the ſide of the firſt joint of the ſaid finger. *Extenſor magnus*, ariſes from the exterior *apophyſis* of the arm, about the wriſt, and the ring-faſhioned ligament; is divided into four tendons, which end in the lowermoſt joints of the fingers. *Indicator indicis extenſor*, it ariſes from the middle and external part of the cubit or *ulna*, and is terminated with a double tendon into the ſecond interjointure of the fore-finger. *Auricularis*, the extenſor of the little finger, it ariſes from the upper part of the radius, and, being carried along with the *ulna* and *radius*, is externally inſerted into the little finger with a double tendon. *Lumbricales, adducens primus, ſecundus, tertius, quartus*, the four worm-like muſcles;

they ariſe from the tendons of the muſculus profundus by the wriſt; and, being drawn out along the ſides of the fingers, are obliquely carried and inſerted into the third joint of every finger. *Abductores interoſſei externi* and *interni*, the drawers from the thumb; they ariſe from the upper parts of the bones of the metacarpium near the wriſt, and in the firſt internodum or ſpace between the joints, with a very ſmall tendon, which, joining with the vermiculares, run along the ſides of the fingers, over the three bones, till they come to the roots of the nails; in the former and upper part whereof, the tendons, being firſt united, are terminated. *Abductor indicis*, it ariſes from the firſt interjointing of the thumb, and is inſerted into the bones of the fore-finger, by which it is drawn from the reſt of the fingers towards the thumb.

The thighs are capable of being bent, extended, drawn to or wheeled inward, or turned about outwards; for the performance of which, they have the following ſixteen muſcles. 1. *Pſoas primus lumbarus*, the firſt loin muſcle; it ariſes from the vertebræ of the loins, and is inſerted into the fore part of the ſmall trochanter, with a round and ſtrong tendon. 2. *Pſoas minor*, it is ſometimes ſpread over, ſometimes under, the former; its beginning is fleſhy, ſometimes one, two, or three, fingers broad in its middle; its original, with a ſmall and flat tendon, being carried over or under the pſoas, comes to the iliac, and with a very broad and ſtrong tendon is inſerted into the upper brim of the os ilii. 3. *Iliacus muſculus*, riſes out of the internal cavity of the os ilium, is joined by its tendon with the lumbal muſcle, and is terminated between the great and little trochanter. 4. *Muſculus pectineus*, the comb muſcle, ſprings out of the upper part of the os pubis, and is inſerted with a ſhort tendon into the inner ſide of the thigh. 5. *Triceps primus*, ariſes from the upper jointing of the os pubis, and, paſſing by the inner head of the thigh-bone, is inſerted into the middle of the thigh. 6. *Triceps ſecundus*, ariſes from the loweſt jointing of the os pubis, and, paſſing by the inner head of the thigh, runs along to the end of the thigh. 7. *Triceps tertius*, ariſes from the middle of the os pubis, and is inſerted juſt below the neck of the thigh-bone. Theſe three muſcles many reckon but one, and call it *triceus*, from its threefold beginning, but ſo accounted it is the greateſt of all the muſcles of the body: and often ends in one muſculous tendon, inſerted into the hinder part of the bone. 8. *Glouteus major*, ariſes from the coccyx or crupper, (the ſpine of the ilii and os ſacrum,) and is inſerted into the os femeris, under the great trochanter. 9. *Glouteus medius*, the middlemoſt both in ſituation and magnitude, ariſes from the inner ſide of the ſpine of the os ilii, and is inſerted into the great trochanter, with a broad and ſtrong tendon. 10. *Glouteus minimus internus*, ſprings from the back of the os ilii, near the acetabulum, with a broad and ſtrong tendon, and is inſerted into the great trochanter: theſe laſt three make up the fleſhy ſubſtance of the buttocks. 11. *Quadrigeminus primus*, it ariſes from the lower part of the os ſacrum, and is placed upon the articulation of the thigh, in the hinder part thereof. 12. *Quadrigeminus ſecundus*, ariſes from the tuberoſity of the huckle-bone, and covers the articulation of the thigh, as aforeſaid. 13. *Quadrigeminus tertius*, is contiguous to the former, and ariſes from the ſame part; theſe three are laſt inſerted into the cavity of the great trochanter. 14. *Quadrigeminorum quartus*, is broader and more fleſhy than the other three, being diſtant from the third of the quadrigemini two fingers breadth; it ſprings from the inner ſide of the apophyſis of the iſchium, or huckle-bone, and is inſerted into the external part of the great trochanter. 15. *Obturator externus* takes up the wide hole between the os pubis and os iſchii, and ariſes from the outward circle of the os pubis, is circumducted through the neck of the thigh, and carried into the cavity of the great trochanter, under the fourth quadrigeminal muſcle. 16. *Obturator internus* riſes from the inward circle of the os pubis, and by a tripartite tendon is inſerted into the cavity of the great trochanter.

To the legs belong eleven muſcles, viz. 1. *Biceps*, having two heads; the firſt ſprings from the joining of the os pubis, the ſecond from the outward part of the thigh; both of them are inſerted with one tendon into the hinder or inward part of the leg. 2. *Semimembranoſus*, ariſes from the ſwelling in the iſchium, and is inſerted into the inner ſide of the leg backwards. 3. *Seminervoſus*, has the ſame original and inſertion with the former, only in the hinder part is carried a little forwards obliquely, before it terminates at the inſide of the leg. 6. *Gracilis* and *gracilis poſticus*, riſes from that line where the hip-bone and ſhare-bones join together, and, deſcending along the inſide of the thigh is inſerted into the inner part of the leg. 5. *Rectus gracilis* ſprings with an acute tendon out of the outward and lower ſpine of the os ilium, is carried along the thigh, and terminates in the fore-part of the leg. 6. *Vaſtus externus* borders upon the rectus gracilis, and ariſes out of the great trochanter, and is inſerted into the leg, a little below the patella on the outſide. 7. *Vaſtus internus*, borders as the former on the rectus gracilis, and ariſes out of the root of the ſmall trochanter, and falls into the inner ſide of the leg, a little below the patella. 8. *Crureus*, ariſes, out of the thigh-bone between the two trochanters, and, cleaving to the thigh, produces its tendon over the epigonatis, unto the fore-part of the leg; the four laſt muſcles are inſerted all into one tendon, which terminate in the beginning of the leg. 9. *Muſculus longus*, it is nearly the longeſt of all the muſcles; ariſes from the former ſpine of the os ilii, and deſcends obliquely into the inner and fore part of the leg. 10. *Poplitæus*, it ariſes from the lower and exterior tubercle of the thigh, and is inſerted four-ſquare into the inner and upper part of the leg, obliquely. 11. *Membranoſus faſcia lata*, riſes from the ſpine of the os ilii, runs obliquely into the outward part of the leg, and, with a broad and long tendon, inveſts almoſt all the muſcles of the thigh.

The foot, or inſtep, has eight muſcles. 1. *Tibiæus anticus*, it is faſtened to the leg, and ariſes near the fibula, and, cleaving to the tibia all along, it degenerates into a tendon, which beneath the ring-like ligament of the foot is divided into two tendons. 2. *Peroneus anticus*, joined to the peroneus poſticus, and has its riſe with two heads, one from the middle and external part of the perone or ſmaller focile; the other from the upper epiphyſis of the fibula: theſe, being carried through the chink of the ancle, terminate in a double tendon, the ſmaller of which is carried into the bone of the little toe; the greater running obliquely under the ſole of the foot. 3. *Gemellus externus*; this has two heads; they both ariſe from under the ham, the one from the inner, the other from the outward, parts of the end of the thigh-bone, and paſs down the back part of the leg, then become tendinous, and, being united, make one ſtrong, broad, and nervous, tendon, which is inſerted into the heel. 4. *Gemellus internus*, this with the other conſtitutes the ancle, and lies under the former, of a livid colour; it ariſes under the ham, by a ſtrong nervous ſubſtance; having paſſed the middle of the tibia, it becomes narrower and tendinous: it is inſerted into the heel. Theſe make the belly or calf of the leg. 5. *Soleus*, it is a broad and thick muſcle ariſing from the upper and hindermore appendix of the fibula, and is inſerted by a tendon into the heel. 6. *Tibiæus poſticus adducens pedem*, it ariſes from the upper part of the tibia, or greater and ſmaller focile, and from the ligament which ties them together, runs along the tibia, and through the cleft of the ancle-bone, where it produces two tendons. 7. *Peroneus poſticus*, it ariſes from the upper but hinder part of the ſmall focile, by a nervous and ſtrong beginning, and, cleaving to the outſide of the perone, it runs down round and fleſhy: it is inſerted under the ſole of the foot, into the bone ſet before the great toe. 8. *Plantaris* covers the whole ſole of the foot; and, ſpringing from the outer part of the thigh-bone under the ham, by a round and fleſhy beginning, paſſing within the leg, between the gemelli, it goes thence to the ſole, and is inſerted into the five toes.

The great toe has five muſcles. 1. *Primus*, or *flexor pollicis*, ariſes from the upper part of the fibula, and is inſerted into the third joint of the great toe. 2. *Secundus*, or *extenſor pollicis*, ariſes from the middle of the fibula, or from the outſide of the tibia, where it is ſeparate from the fibula, creeps along the ſurface of the foot, and ends in two tendons, the one of which is inſerted into the upper ſide, the other into the lower ſide, of the great toe. 3. *Tertius pollicis*, *adductor primus*, that which draws the toe inward, and ſprings from the ligament which ties the heel-bone and the *taulis*, is faſtened inwardly to the bone ſet before the great toe, and by a round tendon is inſerted into the firſt joint of the ſame. 4. *Quartus pollicis*, *adductor ſecundus*, it ariſes from the ligament of the firſt interjuncture of the little toe, then, becoming fleſhy,

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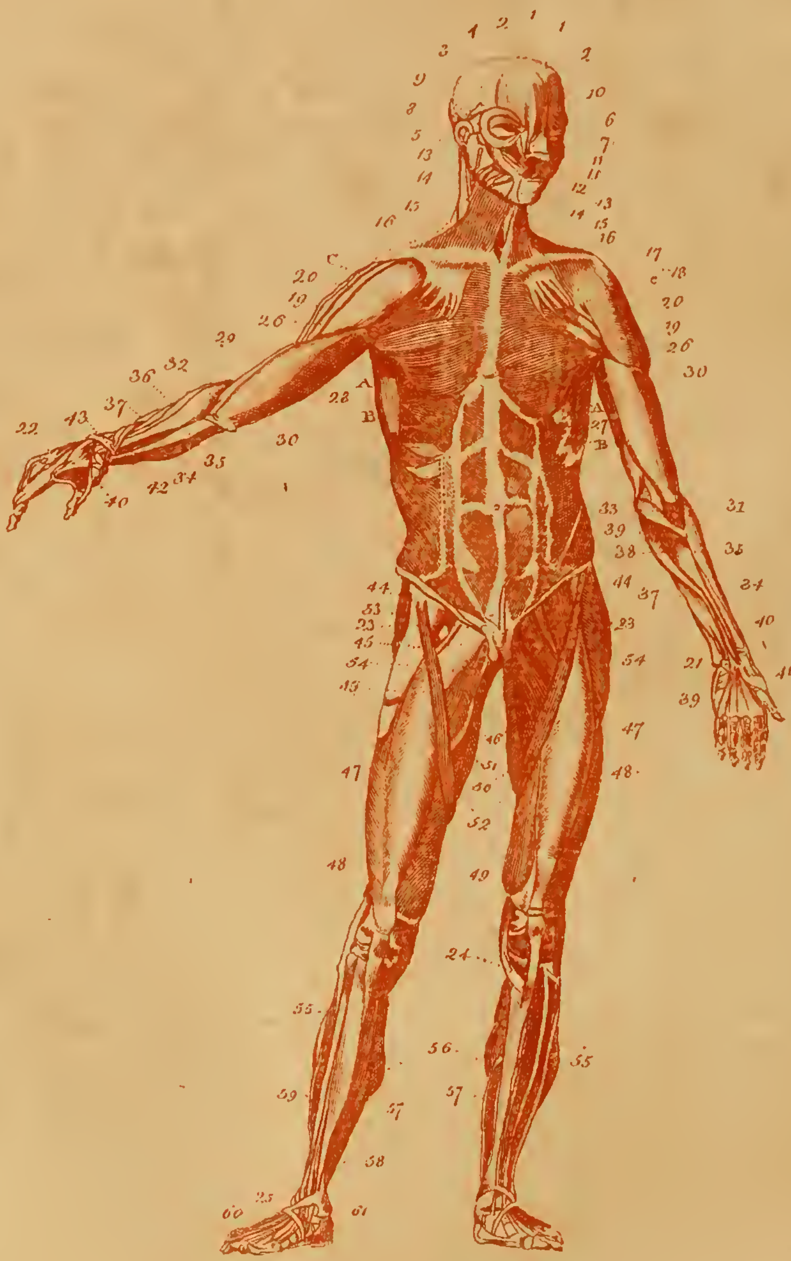
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*The Muscles of the Human Body.*

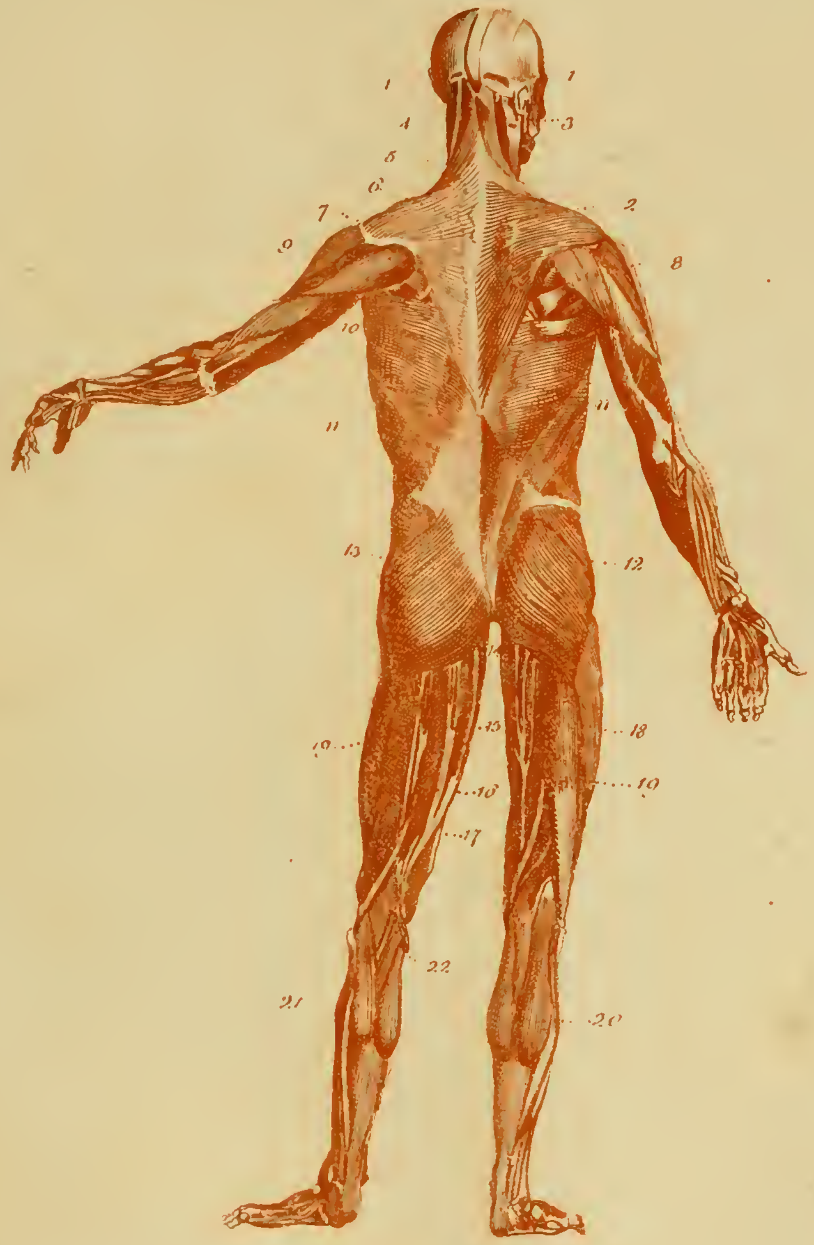
Plate I.

runs over the firſt joint of the toes, and with a ſhort and broad tendon is inſerted a little inwards into the firſt joint of the great toe. 5. *Quintus pollicis, abductor ejuſdem,* it ariſes fleſhy, from the inner part of the heel, and is inſerted extrinſically into the firſt bone of the great toe.

The muſcles of the four little toes are eighteen, having tendons comprehended with a circular and tranſverſe ligament, which encompaſſes them beneath the ancles, juſt as in the wriſt. *Muſculus major,* ariſing from the upper apophyſis of the tibia under the ham, by a long and fleſhy beginning, paſſes under the inner ancle, and by the hollowneſs of the heel goes to the ſole of the foot, where it is divided into four tendons, inſerted into the third and laſt joint of the four toes. *Flexor minor,* lies in the midſt of the ſole of the foot, ariſing from the inner part of the heel-bone, and is divided into four round tendons, which are carried and inſerted into the ſecond articulation of the four toes. *Extenſor longus,* ariſes with a nervous and ſhort beginning from the upper appendix of the tibia, and, cleaving to the ligament which unites the focils, runs down to the foot, paſſing firſt under the tranſverſe ligament; then, being divided into four tendons, they are inſerted into the ſecond and third joints of the four toes. *Extenſor brevis,* lies under the former, ariſes from the tranverſe ligament, fleſhy and broad, and is by four tendons inſerted into the firſt joints of the four toes. *Lumbricalis quatuor,* they ariſe from the tendons of the perforans, ſmall and round, and are inſerted by ſo many ſmall tendons into the ſides of the firſt joints of the four toes. *Interoſſei decem,* they ariſe from the bones of the pedium, and are placed between the bones of the foot, filling the void ſpaces of the metapedium, being ten in number, five external and five internal. They ariſe by the ſides of the bones of the inſtep, the former to the firſt interjointings; the ninth of the interoſſei is the abductor of the great toe, the tenth and laſt is the ſpecial abductor of the little toe.

As to the number of the muſcles in the human body, authors are ſtrangely diſagreed about it: however they are certainly more than five hundred; the principal ones whereof are repreſented in the two annexed plates; thoſe conſpicuous in the fore-part of the human body being expreſſed in plate I. where 1. 1. are the frontal muſcles; 2. 2. the orbiculares palbebrarum; 3. the attollens auriculam; 4. the temporalis; 5. the maſſeter; 6. repreſents the muſcle called conſtrictor, or depreſſor pinnæ narium; 7. the dilatator alæ naſi; 8. the zigomaticus; 9. the place of the elevator labiorum communis, called by Lanciſi, gracilis; 10. the elevator labii ſuperioris proprius; 11. 11. the conſtrictor, or ſphincter labiorum, or orbicularis labiorum; by ſome called oſculatorius; 12. the buccinator; 13. 13. the muſculi maſtoidei; 14. 14. the ſternohyoidei; 15. 15. thoſe parts of the muſcles which ariſe from the clavicle; 16. 16. the caracohyoidei; 17. the ſcaleni; 18. repreſents part of the cucullaris on the right ſide; 18. on the left ſide, is the levator, or elevator ſcapulæ, otherwiſe called muſculus patientiæ; 19. 19. the place where the fibres of the pectoralis unite in ſome meaſure with thoſe of the deltoides; 20. 20. the deltoides; 21. the place in the carpus where the palmaris longus paſſes through a ring in the annular ligament; 22. a remarkable union of the tendons of the extenſors of the three laſt fingers; 23. 23. the productions of the peritonæum, which, perforating the muſcles of the abdomen at the rings, deſcend to the ſcrotum; 24. 24. the place where the three tendons of the ſartorius, gracilis, and ſeminervoſus, are inſerted into the interior part of the tibia, juſt under the knee; 25. 25. the tendons of the extenſors of the toes, which are ſecured by a ligament at the ancle, as appears on both ſides; but on the right ſide, internally, another ligament is repreſented, which fixes the tendons of the extenſor longus digitorum, the tibiæus poſticus, and the flexor pollicis; 26. 26. the muſculus pectoralis; 27. the triceps extenſor cubiti on the right ſide; 28. and 30. the biceps on the left ſide, according to Lanciſi's explication; 29. part of the triceps extenſor on the left ſide; 30. the biceps on the right ſide; 31. the branchiæus internus; 32. the anconæus; 33. the prenator rotundus; 34. 34. the ſupinator longus; 35. 35. the radius externus, according to Lanciſi; 36. the extenſor carpi ulnaris; 37. 37. the cubitæus internus, according to Lanciſi; 38. the radius internus, according to Lanciſi; 39. the palmaris with its tendinous expanſion; 40. 40. the tendons of the muſcles of the thumb; 41. the tendon of the adductor pollicis; 42. the extenſor magnus digitorum; 43. ligamentum carpi; 44. 44. the tendons of the iliaci interni; 45. the pectinæus; 46. one of the heads of the triceps; 47. 47. the rectus femoris on each ſide; 48. 48. the vaſtus externus on each ſide; 49. 49. the vaſtus internus on each ſide; 50. the gracilis; 51. the ſeminervoſus; 52. the ſartorius on each ſide; 53. a part of the origin of the vaſtus externus; 54. 54. the membranoſus: 55. the tibialis anticus; 56. the gemelli; 57. 57. the ſolæi; 58. the tendon Achilles; 59. according to Lanciſi, is the extenſor digitorum longus; 60. the tendons of the extenſors of the toes; 61. the tendons of the extenſor longus, tibiæus poſticus, and flexor pollicis: A. A. portions of the latiſſimus dorſi on each ſide; B. B. the indentations of the ſerratus major anticus; C. C. the ſternum.

The ſecond plate repreſents the muſcles of the back part of the human body; where 1. 1. expreſs the two muſcles upon the occiput, called by Euſtachius, quadrati; 2. the muſculus cucullaris; 3. the ſplenius; 4. the muſculus maſtoideus; 5. the muſculus patientiæ, or levator ſcapulæ proprius; 6. the rhomboides; 7. the articulation of the clavicle with the ſcapula on the right ſide; 8. the deltoides; 9. the teres minor; 10. the teres major; 11. 11. the latiſſimus dorſi on each ſide; 12. the glutæus major; 13. the glutæus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*The Muscles of the Human Body.*

Plate 2

glutæus medius; 14. the muſculus pyriformis; 15. the quadratus femoris; 16. the biceps femoris; 17. the ſemimembranoſus; 18. the membranoſus, according to Lanciſi; 19. 19. the vaſi externi; 20. the gaſtrocnemii; 21. the ſoleus; 22. the plantaris.

## OF THE BONES, OR HUMAN SKELETON.

A BONE is a ſimilar, ſpermatic, part, cold and dry, endowed with hardneſs, ſtrength, and ſolidity, that it might give force to the body, ſuſtain it, and help its motion. Its ſubſtance is naturally hard and ſolid, covered with a membrane, called *perioſtion*, white, with ſome redneſs; hollow in the middle, (except the ribs, &c.) ſmooth; covered in its extremities with a cartilage, and moiſtened with a fat humour, called *medulla*, or marrow. Some bones are perfectly generated in the womb, as thoſe in the ear, being the ſmalleſt in the whole body; they are nouriſhed by arterial blood, as may appear in the bones of young animals, whoſe marrow is yet bloody, as alſo by blood contained in the marrow: but the proximate and immediate nutriment of hollow bones is the marrow; but of bones not hollowed, thick blood ſent in through the pores. The proper matter therefore of a bone is ſeed, which conſiſts of humours and ſpirits. The efficient cauſe is the *vis oſſifica*, or an innate faculty acting by the aſſiſtance of heat.

The bones are joined together, either by *ſimphyſis*, for firmneſs and union; or by *arthrôſis*, articulation or jointing. Natural union or growing together, is when the connection or joining of bones is without motion: and this is with, or without, a medium. *Simphyſis* without a medium is three-fold, viz. by *ſutura*, *harmonia*, and *gomphoſis*. *Sutura*, a ſuture, is the joining of bones by indenture, as if the teeth of two ſaws were thruſt one into another, as in the bones of the *cranium* or ſkull. *Harmonia*, is the joining of bones by a ſingle line, whether ſtrait, oblique, or circular, as in the bones of the noſe and upper-jaw, and ſo all *epiphyſes* in a manner are joined. *Gomphoſis*, or nailing, when one bone is faſtened into another, as a nail in a poſt, ſo the teeth are faſtened in the jaw-bones.

The whole ſtructure of the bones of the head is called *cranium*, the ſkull, becauſe it is as it were an helmet; it is alſo called *calva* and *calvaria:* its ſubſtance is boney, to ſecure the brain; but, in new-born children, it is ſofter than ordinary.

The bones of the head are either proper or common; the proper are in number ſix: 1. *os frontis*; 2. 3. *oſſa ſincipitis*; 4. *occipitis*; 5. 6. *oſſa temporum*. The common bones are only two in number: *os ſphænoides*, and *os ethmoides*. *Os frontis*, the forehead-bone, called alſo *coronale*, is bounded before by the coronal and firſt common ſuture, and in the ſides by the temporal bones; it is but one in thoſe of ripe age, but in children it is double, being divided by a ſuture paſſing from the coronal to the noſe; it alſo has a two-fold table, an internal and an external: on each ſide of this bone, above the eye-brows, there are large cavities, commonly two in number, between the two tables, clothed ſometimes with a green membrane, and containing a ſoft, clammy, and marrowiſh, ſubſtance; from whence two holes paſs into the wide ſpaces of the noſtrils; and another, which ends into the ſkull above the *ſeptum* of the *os ethmoides*, to diſtinguiſh the organs of ſmelling.

*Oſſa ſincipitis*, the bones of the fore-part of the head: theſe cover the moiſteſt part of the brain, are in ſhape four-ſquare and unequal, and of a more rare or ſpongy ſubſtance than the other bones, whence the wounds of the *ſinciput* are deadly: they are joined before with the bones of the forehead, with the *coronal ſuture*; to the *os occipitis*, by the *lambdoide luture*; and to the *oſſa temporum*, by the *ſuturæ ſquamoſæ*: without they are ſmooth, but within unequal, by reaſon of the prints which the jugular veins of the *dura mater* leave behind them.

*Os occipitis*, the bone of the hinder part of the head, conſtitutes almoſt all the hinder part of the ſkull; and is in children three or four bones, but in grown perſons but one. Its form is that of a ſpherical triangle, and is joined to the crown-bones by the *ſuture lambdoides*. It is the thickeſt and moſt compact of all the bones of the head, chiefly at the baſis of the ſkull; (becauſe there the noble ventricle is ſeated, and from thence the nerves ariſe as from a fountain;) but at the edges it is the thinneſt of all. It is ſmooth without, but within it has many ſinuoſities to receive the mennings ſafely. It has five holes, through the greateſt whereof the *ſpinalis medulla* paſſes to the back-bone. The ſmaller ſerve for the going forth of the nerves, and entrance of veins and arteries. It has nine cavities, ſeven within and two without; and two broad proceſſes at the baſis, covered with a griſtle, which is more eminent, and inſerted into the cavities of the firſt *vertebra* for the motion of the head; as alſo another ſmall proceſs behind joined to the firſt *vertebra*. *Oſſa temporum*, the bones of the temple. Their form is uneven, almoſt circular, becauſe of their various ſubſtance, which is like rocks and craggy cliffs, for which cauſe they are alſo called *oſſa petroſa*, the ſtoney or rocky bones. In their upper part they are attenuated like a ſcale, ſo as to be tranſparent, and are joined to the bones of the *ſinciput* like ſcales; before they are joined to the firſt bone of the upper jaw, by its firſt proceſs; and to the *os occipitis*, by the baſtard ſuture: they have ſix holes without, two within: the firſt external hole is large, viz. the auditory paſſage; the other five are ſmall, for veſſels to paſs through. They have two cavities, an outer, covered with a griſtle, which receives the lower jaw-bone; and an inner, which is rather long, and common to the *os occipitis*. The *auricularis* is internal, with a long protuberancy, wherein there is a three-fold cavity, viz. the *drum*, the *labyrinth*, and the *cochlea*.

The *tympanum* or *drum*, called alſo *pelvis*, which contains the internal or inbred air, and the four bones, called *malleolus*, *incus*, *ſtapes*, and *orbiculare*; as alſo a ligament, two *feneſtræ*, or windows, (which are little holes in the cavity,) and a water paſſage; from this cavity goes a channel into the palate of the mouth. The *labyrinthus*, called alſo *fodina*, is a cavity full of crooked and manifold turnings; the entrance hereinto is the *oval feneſtra*, and joins itſelf to the following cavity; it has four holes beſides the oval, and a fifth, which is terminated in the *cochlea* or third cavity. The *cochlea* has three or four windings, (with a wreathed or ſnail-like figure,) the windings mutually receiving one another: thoſe that are thick of hearing have only one or two of thoſe windings; this cavity is clothed with an exceeding thin and ſoft membrane, and adorned with multitudes of little veins, which turn themſelves about the wreathings of the *cochlea*, and by many branches creep into the ſecret turnings of the *labyrinth*.

*Os ſphenoides*, or the wedge-faſhioned bone, becauſe it is ſeated as a wedge in the middle of the bones of the ſkull; at the ſides it goes along with the *os petroſum*, from whence it is ſeparated by a rough chink; above it touches the firſt, fourth, and ſixth, bones, of the upper jaw; below it touches the bones of the palate of the mouth, and is placed under the brain, as a foundation, ſo that it touches almoſt all the bones of the head and upper jaw: in children it is made of four bones, but in grown perſons it is but one. It is ſolid, and the thickeſt of all the bones of the head, where it makes the baſis of the ſkull. In the external table are two remarkable *apophyſes*, near the ſides of the holes of the noſe, formed like the wings of a bat. In the internal table are four little proceſſes, in ſhape of a Turkiſh ſaddle, called *ſella Turcica*, full of little holes, whoſe uſes are to elaborate the in-breathed air, to make ſpirits, and to paſs out *pituitous* excrements through the funnel, out of the ventricles of the brain. It has ſundry perforations, by which the optic and motory nerves of the eye, and other nerves for the motion of other parts, as alſo veins and arteries for nouriſhment, paſs.

*Os ethmoides*, the ſponge or ſieve-faſhioned bone, having in it many holes, (by which ſmells paſs to the brain,) eſpecially in the inner ſide of it, where it joins the head, and this part is properly called *cribroſa*: from this within the ſkull ariſes a ſharp *apophyſis*, reſembling a cock's-comb, by which the *ethmoides* is divided into two parts; from this proceſs is oppoſed another, without the noſtrils, and diſtinguiſhing them, called the divider of the noſtrils, as alſo *ſeptum naſi*. The chief uſe of the *ethmoides* is to alter the air drawn in with ſmells, that the ſpecies of odours may, with the air, be carried to the organs of ſmelling, which end in theſe holes; and therefore in a *coryza*, this bone being obſtructed, the ſmelling is loſt: alſo hereby by the brain is purged, for phlegm is not only evacuated by the *glandula pituitaria* into the palate, but alſo by the *os cribroſum* into the noſtrils.

The bones in the upper jaw are in number eleven, five on either ſide, and one without a fellow: firſt pair, *oſſa zygomatica,* the yoke bones, is in a manner triangular, and conſtitutes the greateſt part of the *os zygomatis* or *jugale,* and a great part of the *orbita* and outward angles of the eye, on the lower ſide. Second pair, *os lachrymale,* is a round, little, and thin, bone, in the inner corner of the eye: by this a branch of the fifth pair of nerves of the brain paſs to the inner membrane of the noſe. Third pair, *os maxillare,* the cheek-bone, the greateſt and thickeſt of them all; it contains all the upper teeth, and makes up the holes of the noſe, and moſt of theſe bones which belong to the upper part of the face: it has large cavities on both ſides very remarkable, both that it might be leſs ponderous, and that it might contain marrow to nouriſh the bones and upper teeth. Fourth pair, *os naſi,* the bone that conſtitutes the external and prominent boney part of the noſe; it is thin, hard, ſolid, and quadrangular: theſe two bones are joined with a ſuture; within they are rough, that the griſtles of the noſe may be the better faſtened. Fifth pair, *os palati,* ſeated at the end of the palate, where the holes of the noſtrils go into the fauces or throat; they are thin, ſolid, and broad, and conſtitute the hinder part of the cavity of the palate and noſtrils. Sixth, *vomer,* the bone without a fellow, like a plough; it is in the inmoſt and middlemoſt under the *ſphœnoides,* and above the palate: it holds up the bridge of the noſe like a partition wall, to which it is joined by the ſuture *harmonia.* Six bones conſtitute the orbit of the eye: 1. the *frontale,* which makes the upper vaulted part: 2. *zygomaticum,* that on the outſide, where the ſmaller corner is, and a portion of the *os ſphœnoides:* 3. another on the outſide, concurring with the former part of the *os ſphœnoides:* 4. *maxillare,* and 5. *lachrymale,* which conſtitute the inner part: 6. the ſcaley table of the *os ethmoides,* which makes up the lower ſide, all united partly by common, partly by proper, ſutures.

In children, till about ſeven years of age, the lower jaw conſiſts of two bones, which are joined together by *ſyncondrooſis*; but in grown perſons it is but one. The arched part of this bone is the chin; at each end of the ſhanks are two proceſſes, whereof one is ſharp, called *corone,* going forward, into which the tendon of the temporal muſcle is implanted; the other *articularis,* becauſe it ſerves for articulation with the temple bones, which articulation is covered with a common membranous ligament. Its ſubſtance is exceeding hard and ſtrong, that it may hold out in biting and chewing; within it, there is a long cavity, where marrow is contained to nouriſh the teeth, and by which a branch of our fifth pair of nerves of the brain runs unto the roots of the teeth with a little vein and artery: this cavity goes quite through the jaw-bone like a pipe, ſo that a copper wire, put in at one end, will come out at the other. It is moveable, and contains ſockets for the teeth; and in old age, when the teeth fall out, the ſockets draw together, and become ſharp.

The teeth are bones properly ſo called, white, ſmooth, hard, and ſolid, being indeed harder than other bones, that they might bite and chew hard things, not much inferior in hardneſs to ſtones. They are naked, without any perioſtion, yet endowed with a kind of ſenſe, as may be perceived by cold drink, or when ſet on edge; which ſenſe is lodged in the inner, ſofter, and more nervous, part. They receive into their cavities nerves, which other bones do not, and by which they are tied to the mandible with a ſinneuroſis. The teeth continually grow, all a man's life, becauſe they are daily worn by biting and grinding. The cavities of the teeth are clothed with a little membrane of exquiſite ſenſe, whence it is that pains of the teeth are ſo exceeding vehement: they have five little nerves from our firſt pair, which are ſpread abroad within, and by ſmall twigs mixed with the mucilaginous ſubſtance in the middle of the teeth; as alſo little arteries to give natural heat and nouriſhment, and little veins to carry back the blood after nutrition.

The tongue-bones are ſeated under the lower-jaw, and in the uppermoſt part of the larynx. They are commonly accounted but one bone, though made up of three. The uſe of theſe bones is to keep the throat open both for the paſſage of the food, and for receiving in of air in ſpeaking or breathing.

The bones of the ears are the leaſt of all, being the bones ſubſervient to hearing; and are four on each ſide. They are all placed in the firſt cavity; their ſubſtance is hard and denſe, but hollow within, that they might be lighter, and contain marrow for their nouriſhment; they are as big in new-born babes as in men, but not ſo hard. The principal of theſe bones are called *malleus*, the hammer; *incus*, the anvil; *ſtapes*, the ſtirrup; and *os orbiculare*, which is round and ſmall, joined by a ſmall ligament to the ſtirrup ſide, where it is joined to the anvil. The uſes of theſe bones are to ſerve the ſenſe of hearing, and to make a paſſage for the excrements of the ears: for the ſtirrup, ſhutting the oval, is moved by the anvil, and the anvil being ſmitten by the hammer, and the hammer by the membrane of the drum, through the impulſe of the external air, the membrane of the drum is in the mean while driven inwards, whereby the inbred air is affected, which, paſſing through the cochlea, cauſes the branches of the auditory nerve to receive the ſpecies of ſounds, and to communicate the ſame to the brain.

The bones of the neck, and the whole vertebræ of the back, from the cranium or ſkull to the os coccygis or crupper-bone, are termed *ſpina*, the thorn, becauſe the hinder part of it is ſharp-pointed like a thorn-branch. The parts of the ſpine are called *vertebræ*, whirl-bones, becauſe by their means the body is turned ſeveral ways.

All theſe vertebræ are hollowed to contain the ſpinal marrow; they are many, for the conveniency of motion. The figure is ſometimes inclining inwards, as the vertebra of the neck, to ſuſtain the gullet; and aſpera arteria; and the vertebræ of the loins, to uphold the trunks of the aorta, and cava deſcending: ſometimes outwards, as the vertebræ of the back, and a little of the os ſacrum, that there may be a larger ſpace for the heart, lungs, bladder, anus, womb, &c. The figure of each vertebræ, above and below, is plain and broad, that luxation may not eaſily be made: round within, convex, and bunching out; but in the neck broader, and more even.

The *vertebræ* of the back are in number twelve, to which as many ribs anſwer. Theſe vertebræ are round on the fore-part, but behind ſomewhat hollow. They are thicker than thoſe of the neck, leſs ſolid, and full of little holes for the paſſage of the nouriſhing veſſels.

The *vertebræ* of the loins are five in number; and belong to the abdomen or lower belly: they are thicker and greater than thoſe of the breaſt, becauſe they uphold them, and the lowermoſt are biggeſt. Their figure is long and ſemi-circular; their ſubſtance ſpongy, and full of holes to give paſſage to the veins; their connection is looſer than that of the back, that we might the more eaſily ſtoop to the ground.

The *os ſacrum* is broad and immovable, being the baſis or foundation of the back, upholding the whole frame of the vertebræ. In infants it is commonly compoſed of ſix bones united by a cartilage, but in men of ripe years it ſeems but one bone at the firſt view, yet, being boiled a long time in oil, it is divided for the moſt part into ſix ſeveral vertebræ; for each of them has a body, and proceſſes, and has a large hole to receive the ſpinalis medulla. But in this they differ from the other vertebræ, becauſe in thoſe the lower parts is the bigger, but in theſe the ſmaller; wherefore, the uppermoſt is the biggeſt, and the loweſt the leaſt. Its figure is almoſt triangular; in its fore-part hollow, ſmooth, and even; in its hinder-part, bunching and rough, with little holes to ſend out nerves.

The *os coccygis*, the crupper or rump-bone, is under the former, conſiſting of three bones and two griſtles, and is called os coccygis, the cuckoo's bill, from the likeneſs thereof. It is joined by a cartilage; for the firſt bone of it has a ſmall hollowneſs which receives the laſt vertebræ of the os ſacrum. Of theſe three bones, the lower is ſtill the ſmaller: and, in men, they are bent inwards to ſtay the great gut and the ſphincter muſcle which are tied to it: but in women they bend outward to give way to the womb in the time of travail. Theſe bones are of a ſpungy and ſoft ſubſtance, and have neither proceſs nor any hollowneſs. Their union with the os ſacrum is looſe, to give way for the excluſion of large excrements; for otherwiſe a luxation might happen, cauſing exceeding great pains; as in hard labour it now ſometimes happens.

The *os innominatum*, the hoop-bone, or flank-bone, conſiſts of three bones, viz. *os ilium*, *os iſchium*, and *os pubis*, all which are joined together by griſtles till about the ſeventh year: afterwards, eſpecially in thoſe of ripe years, the cartilages being dried, they ſeem to be but one bone. Theſe three bones, together with the os ſacrum, make that cavity which is called *pelvis*, the baſon or bowl, which is bigger in a woman than in a man, that the womb of a woman with child may the better reſt upon it. In hard labour the ſhare-bone, or os pubis, and the os ſacrum, will part, the cartilages and ligaments (being bedewed with ſuperfluous humidity) giving way. 1. *Os ilium*, the huckle-bone, ſo called becauſe it contains the gut ilium, is the firſt part, the higheſt, the broadeſt, and the greateſt, in figure ſemi-circular, arched without and hollow within: the ſemi-circle is called *ſpina*, the arched part *dorſum*, and the hollow part *coſta*. 2. *Os pubis*, the ſhare-bone, is ſeated in the fore-part; and is parted in the middle by a cartilage not very hard: it is joined to the bone of the other ſide by ſynchondroſis, which in women is twice as thick and as wide as in men, that theſe bones in child-bearing may not be luxated or disjointed, but only looſened and made wide for the coming forth of the child. 3. *Os iſchium*, the hip-bone, is the lower and more outward part, wherein is a large and deep cavity, called *acetabulum*, the ſaucer, or *pixis*, the box, which receives the large head of the thigh-bone: the cartilaginous proceſs of this cavity, is called *ſupercillum*, the brow. The *coxendix* is placed between the huckle and ſhare bones, and is knit to the os ſacrum by a double ligament; the one is inſerted into the ſharp proceſs of the hip; the other behind into its appendix, that the inteſtinum rectum and its muſcles may be ſuſtained.

The *coſtæ*, or ribs, in figure reſemble a bow, or ſegment of a circle; their original from the vertebræ is narrower and rounder, growing broader as they come to the breaſt: in their upper ſides they are blunt and thick; in their under part ſharp and thin: the uppermoſt ribs are more crooked and ſhorter; the middlemoſt are longer and broader; the lower are cut again ſhorter. Their ſubſtance is partly cartilaginous, and partly boney, the boney part being towards the *vertebræ*; where they are furniſhed with two little apophyſes or knobs: the firſt of which is articulated with the hollow of the *vertebræ*: the ſecond is joined to the tranſverſe proceſs of the *vertebræ*: but the five lower ribs by a ſimple knob. The number of the ribs are twelve on each ſide: ſeldom thirteen, more rarely eleven: and, when they are ſo found, you may count their numbers either ſupernumerary or deficient. They are two-fold, viz. either legitimate and true, or illegitimate and falſe. The true or legitimate are the ſeven upper ribs, becauſe they touch the breaſt-bone by their length, and make as it were a circle: they alſo make a perfect articulation with the breaſt-bone. The illegitimate or baſtard ribs are the five lower ribs, which are ſhorter, ſmaller, and ſofter, not reaching to the breaſt-bone: they are ſemi-circular and arched without, hollow within: they terminate into longer griſtles than the true ribs, which, being turned back upwards, ſtick one to another, the laſt excepted, which is the leaſt, and ſticks to none. The eleventh rib, and ſometimes the twelfth, are tied to the ſeptum tranſverſum; and ſometimes the laſt grows to the oblique deſcendent muſcles of the belly, without the midriff; or has the circumſcription of its proper muſcle. The uſe of the ribs is to defend the breaſt, and the heart, lungs, and other bowels, therein contained; as alſo to help the motion of the breaſt and parts adjacent, in ſuſtaining the muſcles and fleſhy parts thereof.

The *ſternum*, or breaſt-bone, is placed upon the fore-part of the cheſt, and reſts upon the ribs: its ſubſtance is partly boney, but ſpungy and red; partly griſtly; its figure is convex, broad, and long. It is compoſed of three bones, as may be ſeen in young people; but in old men it commonly appears but one: they are diſtinguiſhed by tranſverſe lines, and are knit together by the ſynchondroſis, for griſtles are interpoſed like ligaments. Under this is the pit of the ſtomach, where the upper and left orifice is, called *ſcrobiculus cordis*. The uſe of the ſternum is, firſt, to defend the heart (like a ſhield) from outward dangers: ſecondly, to uphold the mediaſtinum: thirdly, to collect and faſten the ribs.

The collar-bones, being in number two, are called *claviculæ*, keys, becauſe they ſhut up the breaſt or thorax; and as it were lock the ſcapula, or ſhoulder-blades, to the ſternum. They are ſituated croſs-wiſe, under the lower part of the neck, on the top of the thorax on each ſide: externally, they are convex, on the inſide a little concave: their ſubſtance is thick, but fiſtulous and ſpungy, and therefore eaſily broken; their ſuperficies are rough and uneven. Their uſe is to aſſiſt in the various motions of the arms; as alſo to uphold the ſhoulder-blades, that they ſhould not fall upon the breaſt, together with the ſhoulder-bone; moreover the bone of the arm reſts upon this bone, as upon a prop, that it may be the more eaſily moved upwards and backwards. Hence brutes have no collar-bone, the ape, ſquirrel, hedge-hog, and mouſe, excepted.

The ſhoulder-blade is a broad and thin bone, reſting upon the upper ribs behind, like a ſhield. Its ſubſtance is hard and ſolid; its figure almoſt triangular, the outſide ſomewhat arched, but the inſide hollow; it has alſo a ſpine or ſharp point, looking both above and beneath the cavities, called *interſcapulia*. In the inſide of this bone, about the middle, there is a hole, by which a vein doth paſs for its nouriſhment. It has five epiphyſes, three at the inſide, and two at the baſis: it has alſo ligaments, which join its head to the *humerus* and the *acromion*, or ſhoulder to the *clavicula:* and common, thin, and membranous, ligaments, which compaſs the joint of the ſhoulder-blade and arm. Its uſes are, 1. to ſtrengthen the ribs: 2. for the articulation of the *humerus* and *clavicula:* 3. for the inſertion of the muſcles: 4. to cover the heart, and defend the back from being hurt.

*Os brachii*, or bone of the arm, called alſo the ſhoulder-bone, is but one, great, ſtrong, long, roundiſh, and uneven. Its ſubſtance is hard and ſolid; it is hollow all along within, containing marrow, but at the two ends more broad, and a little ſpungy. In its upper part it has an appendix, *epiphyſis*, or great head, growing to it; which is round, covered with a griſtle; and articulated with the *ſcapula* or *diarthroſis*. In the top of it is alſo a long chink, through which the nervous head of the *muſculus biceps* doth paſs. The longer part is articulated to the *ulna* and *radius*, where there are two apophyſes; an external, which is leſs, and cruſted with a griſtle; and an internal, having two cavities, repreſenting a pulley, with which the cubit is joined by ginglymus, ſo that it may be bent to a moſt acute angle, but not extended beyond a right line.

The bones of the cubit, or elbow, are two: the ſmaller above, called *radius*, and a larger below, called *ulna*. They are ſhorter than the ſhoulder, have epiphyſes on either ſide, and, reſting mutually one upon another, are joined by a membranous ligament: above, the *ulna* receives the *radius*; but below, the *radius* receives it. Their ſubſtance is firm and ſolid; they are long, and contain a marrowy ſubſtance; but their ſurface is ſomewhat rough, by reaſon of the lines appointed for the muſcles.

*Carpus*, the wriſt, hath eight diſtinct bones, all of them unequal, and differing in ſhape and magnitude. At firſt they are griſtles, afterwards ſpungy bones, covered with very ſtrong griſtly ligaments, which faſten them together as if they were but one bone: theſe ligaments, ariſing from the lower proceſſes of the *ulna* and *radius*, ſerve for articulation: but there are angular or ring-ſhaped ligaments, which are tranſverſe, and compaſs the wriſt, to comprehend, ſtrengthen, and ſafely carry, the tendons, which paſs through the carpus; theſe are many, though they ſeem to be but one ligament, the internal comprehend the tendons of the muſcles which bend the fingers; the external the tendons of the muſcles which extend them.

The *metacarpus*, or palm of the hand, has four bones, of a hard and ſolid ſubſtance, and hollow, containing marrow; they are round, and bigger than thoſe of the fingers; that which anſwers to the fore-finger is biggeſt, and ſo ſtill the lowermoſt are ſmaller. Between each bone a diſtance is left for the *muſculi interoſtæi* of the fingers: and in the palm there is a tranſverſe ligament, which ties the bones of the fingers to the *metacarpium.* Above and beneath they have epiphyſes: by the upper, they are joined to the *carpus,* or wriſt; by the lower, they enter into the hollowneſs of the fingers.

The bones of the fingers are in number fifteen, each of them having three bones, and anſwering the bones of the *metacarpus,* the thumb excepted. The thumb has no connection with the bones of the *metacarpium,* becauſe it is articulate with the wriſt, with a manifeſt motion; whereas the bones of the palm are joined to the wriſt without manifeſt motion; as alſo becauſe the upper joint of the thumb is ſhorter than the bones of the *metacarpium,* and not anſwerable to them. Each finger has ligaments on their inſides, according to their length, like channels, whereby they are faſtened one to another.

The thigh has but one bone, which is the greateſt and longeſt in the whole body. In its ſuperior extremity, the head is round, to which a ſlender part is added, called the neck; from the neck are two *apophyſes* produced, to which the muſcles, called *rotatores,* are faſtened, and therefore they are called *trochanters.* The lower part of the thigh has two low prominences or heads, called *condyli,* a cavity being left between of a thumb's breadth, through which the veſſels paſs, with a nerve of the fourth pair, which cavity alſo admits the middle and eminent *apophyſis* of the *tibia* or leg: in like manner the *condyli* are received by the cavities of the leg, by a looſe articulation, called *ginglymus:* the inner of theſe heads is more thick, the outer more broad and flat. The upper part of this articulation is called the knee, the hindermoſt the ham.

The *patella,* or knee-pan, is ſomewhat round, about two inches broad; plain, without having many holes, but within bunched, and there covered with a cartilage: its ſubſtance in young children is cartilaginous, but in grown perſons boney; its figure is almoſt like a buckler or ſhield; its ſituation is upon the jointing of the thigh and leg, where the knee is encompaſſed with a membranous ligament, the *patella* excepted. It grows to, and is faſtened by, certain thick tendons of ſome muſcles of the thigh; as the ſecond, third, and fourth, muſcles, which extend the *tibia,* and paſs by the knee to it, and are inſerted into the fore-knob of it: its uſe is taken from its ſituation, being ſet before the thigh-bone and *tibia,* to ſtrengthen the articulation, leſt the thigh-bone, in going down any hill, ſhould ſlip out forwards; as alſo to defend the tendons of the muſcles.

The ſhank, or leg, is compoſed of two bones; the one, being the inner and the greater, is called *tibia;* the other *fibula.* *Tibia,* the ſhank-bone, has in its upper part a proceſs in the middle, which is received by the cavity of the thigh-bone. It is joined to the thigh-bone by *ginglymus:* the *fibula* only cleaves to the *tibia,* and touches not the thigh-bone. In the lower part there is an apophyſis void of fleſh, ſticking out with a bunch near the foot, which is called *malleolus internus*, the inner ancle-bone: as the proceſs of the fibula is called *malleolus externus*, the outward ancle-bone. *Fibula*, the button, (becauſe it ſeems to button together the muſcles of the ſhank,) which is alſo called ſura, the calf, is a firm bone, being drawn along before the tibia without, as the radius before the cubit. The upper end with its round head ſubſiſts beneath the knee; but, with its hollowneſs, it receives the lateral knob, which is under the epiphyſis in the upper end of the tibia. In the middle there is a diſtance between the tibia and fibula; in which ſpace is a thin broad ligament, joining theſe bones in longitude, and where alſo the muſcles of the feet are placed.

The bones of the *tarſus*, or inſtep, are ſeven. *Aſtragalos*, the game bone, to which are joined the great and ſmall focile. *Pterna*, the ſpur of the foot, or heel-bone, into which the greateſt and ſtrongeſt chord or tendon in the whole body is inſerted. *Os naviculare*, from its likeneſs to a boat; it is long, bunched without, and hollow within, and covered with a cartilage. *Os teſſeræ*, or die-ſhaped bone, becauſe it hath ſix ſides; it is greater than the reſt, and placed before the heel, joined to the fourth and fifth bone of the metatarſus: in the hinder with the heel-bone: the other ſides are joined to no bones. *Cuneiformia, calcoidea*, the wedge-like bones, or bones of the foot, and are articulated with the ſcaphoides, or os naviculare: being joined, they repreſent a vault: for above they are convex, beneath hollow, to receive the tendons and muſcles.

The *metatarſus*, or ſole of the foot, has five bones, which are ſolid without, hollow within, longer than the bones on the back of hand, and knit to the bones of the tarſus. That which ſtays the great toe is the thickeſt, that which ſtays the next toe is the longeſt, the next is ſhorter, and the reſt each ſhorter in order. The lower end of that which ſtays the great toe, is received by the cuneiforme majus: the ſecond, by the cuneiforme minus: the third, by the third wedge-like bone: the other two, by the two tops of the os cubiforme.

The bones of the toes are in number fourteen: the great toe has only two, the reſt three apiece. They are ſolid without, hollow within; and have three joints and two proceſſes, anſwering in all things to the bones of the hand. The lowermoſt joints have two knobs, received by the ends of the middlemoſt joints, but the uppermoſt receiveth: the uppermoſt joints have alſo a deep hollowneſs, becauſe they receive the ends of the bones of the foot.

1. There are certain little bones called *ſeſaminia* or *ſeſamoidea*, being almoſt like ſeeds, both in form and magnitude, being for the moſt part in number fifty-eight.

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They are round and a little flat, and leſs in the feet than in the hands, excepting thoſe in the great toe. 2. They are moſt commonly twelve in each hand, or twenty-four in both hands, and ſo many in each foot. They grow to the tendons of the muſcles which move the fingers and toes, under which they lie, wrapped up in the ligaments, and come away in cleanſing the bones, unleſs great care be uſed. The uſes of theſe *ſeſamoidean* bones are to defend the tendons; to ſtrengthen the joints, and preſerve them from luxation.

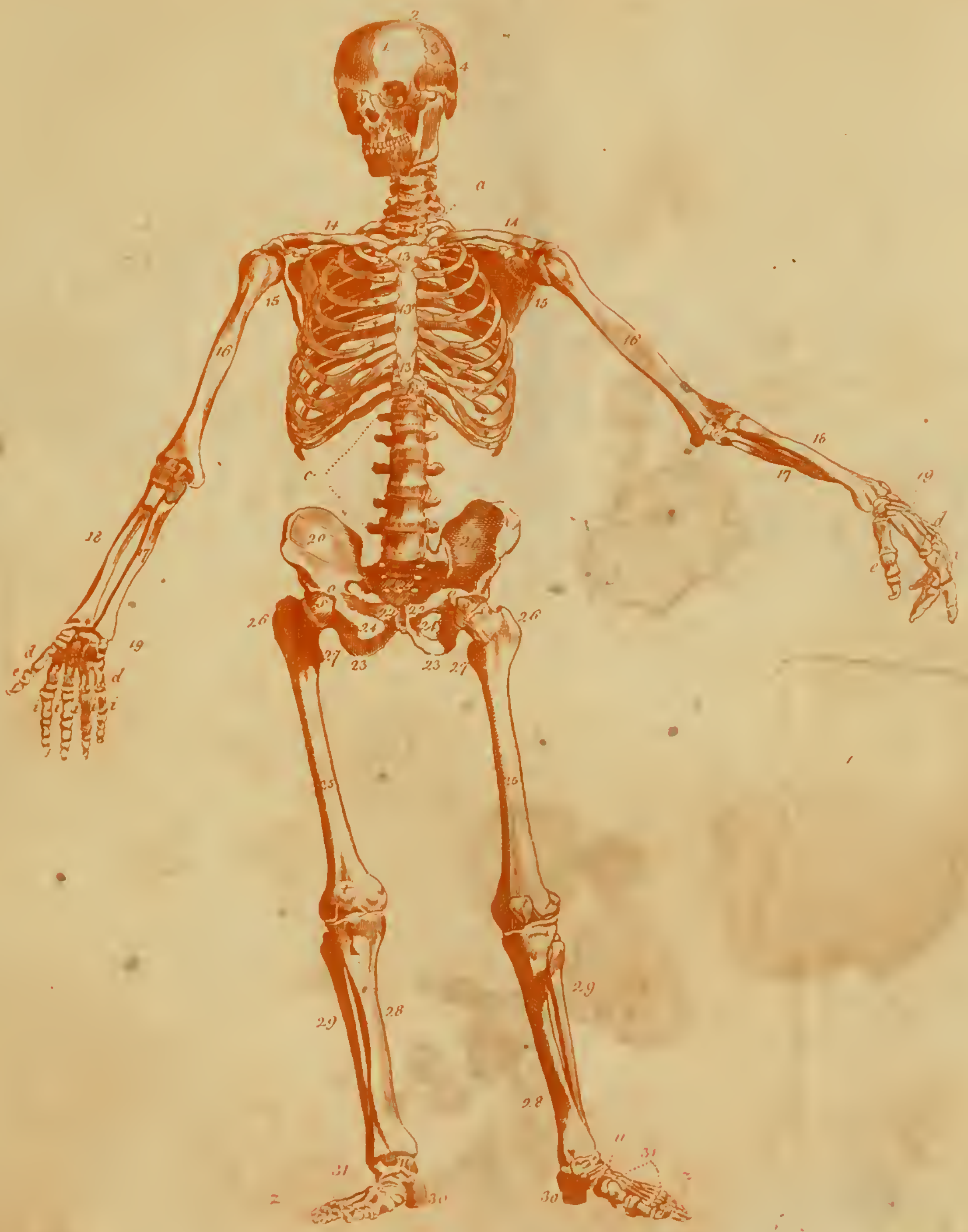
The annexed plate demonſtrateth the ſkeleton, or bones, of the human body, which conſiſts of 239, excluſive of the *ſeſamoideans, os hyoides,* and bones of the ears; which, being added, would make the total number 308.

1. Os frontis, or frontal bone; 2. ſutura coronalis, or coronal ſuture; 3. vertex ſiniſter; 4. ſatura ſquamoſa; 5. proceſſus oſſis ſphenoides; 6. os temporis, or temporal bone; 7. proceſſus maſtoideus; 8. os mali; 9. oſſa naſi, or bones of the noſe; 10. 11. the ſuperior and inferior maxillary bones; *a.* vertebræ of the neck; *b.* vertebræ of the back; *c.* vertebræ of the loins; 12. os ſacrum; 13. the ſternum, or breaſt-bone; +. the coſtæ; 14. the clavicula, or clavicles; 15. the ſcapula; 16. the humerus, or arm-bones; 17. the ulna; 18. the radius; 19. the carpus, or wriſt; *d.* the metacarpus; *e.* the pollex; *i.* oſſa digitorum manus; 20. the os ilium; *o.* the os iſchium; 22. the os pubis; 23. tuber iſchii; 24. foramen magnum; 25. os femoris; *r.* collum oſſis femoris; *s.* caput oſſis femoris; 26. the trochanter major; 27. the trochanter minor; *t.* the patella; 28. the tibia; 29. the fibula; *u.* the talus; 30. the calcaneus; 31. the metatarſus; *z.* oſſa digitorum pedes.

## Of the ABDOMEN, or BELLY in GENERAL.

THE abdomen is all that part, diſtinguiſhed within (by the midriff) from the cheſt to the *os pubis.* It is bounded by the *cartilago mucronata,* vertebræ of the loins, *os ſacrum,* hip-bones, *os pubis,* and the baſtard ribs on either ſide. It is divided into three regions or parts: firſt, the uppermoſt, called *epigaſtrium,* each ſide of which is called *hypochondrium,* lying under the griſtles of the ſhort ribs: it is bounded between the *cartilago mucronata:* ſecondly, the middle part, called *regio umbilicalis,* which extends from three inches above the navel to three inches below it: the lower part, called *hypogaſtrium*; the lateral parts are called *inguina,* the groins; in the right ſides of which, are parts of *colon* and *cæcum,* which are tied together; in the left, a great part of the *colon* and *inteſtinum rectum*; the fore part of it is called *aqualiculus,* and the lower part, which is covered with hair, is called *pubes,* the ſhare; the hair begins to appear here in girls about the twelfth year, but in boys about the fourteenth year, of age. Under this region in women are contained the bladder, matrix, and *inteſtinum rectum.*

N.º 3.



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The Bones, or Human S

LONDON:
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The *peritonæum* is ſo called from ſtretching and ſpreading about, being drawn over all the parts between the midriff and thighs. Its original is from the firſt formation, at the third vertebra of the loins, where it is thicker, ſo that it cannot, in that place, be ſeparated without breaking. The muſcles of the belly being taken away, the peritonæum comes in view: it is tied above to the midriff; below to the ſhare and flank bones; in the fore-part firmly to the tranſverſe muſcles, but chiefly to their tendons about the linea alba; behind to the fleſhy heads of theſe muſcles. It is ſpermatical, cold and dry by nature, and of a ſubſtance not ſimple and uniform, but double, and unequal in thickneſs. It is a membrane double in all places, but it is moſt apparent about the vertebræ of the loins, where, between the duplications, lie the vena cava, the aorta, and the kidneys. Its uſe is to ſend connections to all the parts; to beſtow coats upon all the bowels of the abdomen: to give a covering to the diaphragm, liver, and ſpleen; to produce the ligament which upholds the liver; to make a communion with all the principal parts by veins, arteries, and nerves; to produce the omentum; and, by its reduplication, the meſentery.

The *omentum*, or caul, ſo called, becauſe it floats or ſwims upon the guts: it lies under the peritonæum, and is ſituated at the liver, ſpleen, and bottom of the ſtomach: in ſome it ceaſes at the navel, in others it falls below the navel, and ſometimes it reaches to the os pubis, where it is inſerted. It is a thin membrane, endowed wirh much fat, double, and disjoined. In men, when it deſcends into the ſcrotum, it cauſes the rupture epiplocele, which happens moſt commonly on the left ſide, becauſe it is extended rather to the left than to the right ſide. Its ſubſtance is membranous, that it might admit dilatation and extenſion; it is compact, to hinder the diſſipation of the internal heat, and to repel the external cold: it is tied to the ſtomach, being a middle part between the colon and the ſpleen. Its uſes are to cheriſh and ſtrengthen the internal heat of the ſtomach and inteſtines; to give nouriſhment to the parts in time of famine; to contain the humours flowing from the inteſtines, which the glandulus cannot receive wholly at one time; to prop up the branches of the veins and arteries of the ſtomach, duodenum, colon, and ſpleen; and to generate the fat.

The ſtomach, called *ventriculus*, from its cavity, is ſituated in the epigaſtrium, a place encompaſſed with no bones, that it might ſtretch the more eaſily, immediately under the midriff, which it toucheth, ſo that, if it be too full, it cauſeth a difficulty of breathing, by hindering the motion of it. In the fore-part and on the right ſide, it is covered with the hollow of the liver; in the left by the ſpleen; ſo that the ſtomach is as it were between two fires, bending a little towards the left hypochondrium, and towards the back part it leans on the aorta, the cava, and the pancreas, which helps its heat. It is leſs in women than in men, to give way to the diſtenſion of the matrix, and it is compoſed of three tunicles; the outwardmoſt is common from the peritonæum, and is the thickeſt; the middlemoſt is proper to itſelf, and fleſhy; the innermoſt is from the *dura meninx*, and wrinkled, as alſo hairy like a piece of ſilk: this is continued with the tunicle of the œſophagus, mouth, and lips, that nothing may be received in which is ungrateful to the ſtomach: hence it is, that, when choler is in the ſtomach, the tongue is bitter and yellow. It is ſpungy, and has paſſages like ſhort fibres, from this inner ſurface to the outward, that the thinner chylus may be the better detained. The inmoſt coat ſerves chiefly for ſenſe; the middlemoſt for the office of motion; and the third, that it might be as a covering for the whole. The ſtomach has two orifices, and both of them in the upper region thereof; the left is called *os ſtomachi*, the right the *pylorus*, or porter: the *os ſtomachi*, or left orifice, has orbicular fibres, that, the meat and drink being once received within the capacity of the ſtomach, it may, by a natural inſtinct, exactly ſhut up the mouth of the ſtomach, leſt the fumes and heat ſhould break out, which might not only go into the brain and breed diſeaſes there, but alſo hinder concoction. The right orifice is of equal height with the other; leſt the meat and drink ſhould ſlip through before they are digeſted. It is not wide like the former, becauſe it is to tranſmit the elaborated chyle, which is done by the ſtrength of the ſtomach, in contracting itſelf. Wherefore the *pylorus*, beſides its tranſverſe fibres, has a thick and compact circle, repreſenting the ſpincter muſcle, that it might the more eaſily ſhut and open. The ſtomach has arteries from the *ramus cœliacus*, which accompany every vein, that blood may be ſupplied from the heart for nouriſhment of the part: it has likewiſe many nerves; viz. two in its orifice from the ſtomach-branches, which being produced, after they have run back in the thorax, and furniſhed the lungs and *pericardium*, are covered with ſtrong membranes. Theſe ſo croſs one another, that they are carried obliquely, and without doubt with greater ſafety. The right branch compaſſes the fore and left part of the mouth of the ſtomach; the left branch, the hinder and right part of the ſame: from theſe branches of nerves are ſent downwards, to the very bottom; a branch goes from the left nerve, along the upper part of the ſtomach, to the *pylorus*, which it infolds with certain branches, and goes to the hollow of the liver: other two nerves alſo go to the bottom of the ſtomach, from the branches which run along by the roots of the ribs. Hence it is, that, when the brain is hurt, the ſtomach is ſick, and falls a vomiting, as in a *vertigo hemicrania*, &c. alſo, when the ſtomach is affected, the head and brain are ill, or afflicted with pain; and by reaſon that the orifice of the ſtomach is ſo compaſſed with nerves, as if it were altogether made of nerves, it becomes of a moſt exquiſite ſenſe; and hence it is that vomiting ſo often ſucceeds in many diſeaſes, where there is a conſent of parts with the ſtomach. The ſtomach is the ſeat of hunger, and does the firſt of all parts feel the want of food; (afterwards the other parts by faintneſs and univerſal debility;) for, the blood being ſpent upon the nouriſhment of the body, the fibres of the internal membrane of the ſtomach are contracted, and ſo this pain, which is called hunger and thirſt, is cauſed.

The *inteſtines*, or guts, begin at the pylorus and end in the anus or fundament. They are called inteſtina, or inwards, becauſe they are in the inmoſt ſeat of the body. They are of a round figure, that they might the better contain the nouriſhment; of a membranous ſubſtance, the better to have conſtriction and dilatation; and indeed their ſubſtance is almoſt the ſame with the ſtomach, having three coats, one common and external, being bred immediately from the *meſenterium*, but mediately from the *peritonæum*. The ſecond, which is the middlemoſt, is proper, being membranous, ſtrong, and furniſhed with fleſhy fibres. The third, which is the innermoſt, is alſo proper, nervous, and lined with a cruſty ſubſtance, framed of the excrements of the third concoction of the guts, glazed as it were with a mucus or phlegmatic ſubſtance, bred in the firſt concoction, by which excoriation is not only hindered, when ſharp humours paſs through the guts, but alſo by its aſſiſtance the expulſion of the fœces is furthered. This internal membrane has ſuch a cruſty ſubſtance, that the mouths of the meſeraic veins might not be ſtopped; and that neither they nor the coat itſelf might be made callous by the continual thoroughfare of the chyle. The fibres of the internal membrane of the ſmall guts are oblique, but of the external coat tranſverſe; becauſe theſe are appointed for the retention and expulſion of the chyle; but, in the thick guts, the inner coat has tranſverſe fibres, the outward has oblique and ſtraight, becauſe they are appointed for the expulſion of the excrements: the inner membrane alſo of the ſmall guts is full of wrinkles to ſtay the chylus from paſſing too ſoon. As to the length of the inteſtines, they are in general ſix times as long as the whole body: it is wonderful that the guts (of ſo great a length) ſhould be comprehended in ſo ſmall a compaſs, ſo as that they are not above a ſpan diſtant from the centre. They have a motion, which is periſtaltic, or the worm-like motion, by which they move themſelves all over by a contraction from the upper parts downwards; moreover they have many turnings and windings, or bendings, which ſerve to keep the nutriment, till the concoction is perfectly finiſhed, and chyle diſtributed.

The *meſentery* is ſo called, becauſe it is the middle of the guts. It is one in number, but divided into two parts, the *meſareum* and *meſocolon*. By the *meſareum*, the ſmall guts are knit together; by the *meſocolon*, the thick guts are tied together. The ſubſtance of the meſentery is a double membrane, one above another. Its ſituation is in the middle of the abdomen, ſticking to the tranſverſe proceſſes of the vertebræ by ligaments, whence is its original: for it ariſes from the firſt and third vertebræ of the loins, where membranous fibres are produced from the peritoneum, which turn into ſtrong membranes. The veſſels of the meſentery are veins, arteries, and nerves, which paſs to and from the guts, between the membranes. The veins are called *meſeraicæ*, and they are two-fold, viz. *ſanguineæ* and *lacteæ*, both which are almoſt innumerable. The *venæ ſanguinæ*, or *meſeraicæ*, receive the blood from the arteries, after nouriſhing of the parts, and ſo convey it back again to the liver. The *venæ lacteæ*, aſcending from the guts, and carrying the chyle, do centre in the glandules, or receptacles of the chyle. Theſe glandules of the meſentery, are to prop up and ſupport ſundry diſtributions of the branches to the *vena porta* and *arteria magna*; and hence it is, that about the centre of the meſentery are the greateſt kernels, becauſe there is the diſtribution of the greater and more collected veſſels: if thoſe become ſchirrhous, an atrophy, or extenuation of the whole body, viz. a waſting, leanneſs, and pining, follow, becauſe the paſſing of the chyle is hindered, whereby the nouriſhment of the body is loſt. Their ſubſtance in men is glandulous and ſolid, like other glands of the meſentery, watered as it were with the *venæ lacteæ*, yet capable of chyle in their leaſt corners. Their connection is in the hinder part *vertebræ lumbares:* in the fore part they are joined to the meſentery by ſmall milky branches, which carry the chyle to theſe fountains or receptacles. The uſe of theſe milky glandules is to receive and contain the chyle coming from the *venæ lacteæ* of the meſentery: as alſo to digeſt and prepare it by the help of the neighbouring hot veſſels, viz. the artery and vein, and then, being prepared, to thruſt it out into the *thoraices*, and other parts, as the liver, which is eaſily proved by ligature; for, if theſe *lacteæ*, whether in the thorax or going to the liver, be bound, they always ſwell on that ſide next to the glandules or meſentery, and grow empty on the other ſide: they alſo ſqueeze out the ſerum, being ſeparated from the chyle in that light preparation, and expel it either into the veins adjacent to them; or into the emulgent arteries, to which they ſend branches; or into the capſulæ atribilariæ, appointed for melancholy; or, laſtly, into the doubling of the peritoneum, in which they abide, which is ſometimes the cauſe of the dropſy aſcites: and herein we have reaſon why a dropſy is many times ended by diuretics and diſſolved by urine; and how thoſe, who are extreme drinkers, do ſo immediately evacuate what they have drunk; for that the ordinary way through the liver, heart, arteries, emulgent veins, ureters, and bladder, is vaſtly longer, and more tedious: hence alſo the cauſe is ſeen, why, in a real diabetes, the drink is ſo voided through the bladder in a very ſhort ſpace, as it is received, without change of conſiſtency, colour, taſte, or ſmell; hence too appears

pears the reaſon of an atrophia of the parts, eſpecially thoſe of the thorax, which draw the chyle out of the milky receptacles; for that they are ſometimes preſſed together, whereby the diſtribution of the chyle is obſtructed: ſometimes alſo they are inflamed, tumified, and afflicted with a ſchirrhus. Hence it is that lithontriptic or nephritic medicaments do preſently eaſe ſuch as have a pain in their reins: as likewiſe cantharides, and ſuch as incite to luſt, do immediately, without ſtopping the paſſage, come to the arteries emulgent and ſpermatic; becauſe that, in the accuſtomed journey, (much the longer way,) the virtues of the medicaments would eaſily be enervated. And here the reaſon is obvious why diuretic and nephritic medicaments make ſuch an impreſſion of ſmell and colour in urine, as is manifeſt in caſſia, turpentine, juniper, aſparagus, and other like things. Many of the lacteæ of the meſentery, coming through the greater glandules, and the ſides of the portæ, are grafted into the liver. Their entrance is about the third lobe, to which many of the lacteæ from the meſentery and appendices of the ſtomach do come. From the upper part of the milky glandules, immediately under the diaphragm, there ariſe as many milky branches as there are glandules, which, through the middle of the ſpine pierce the diaphragm, and, by mutual inſertion, two of them are joined about the firſt vertebra of the loins; another branch, coming out of the ſecond glandule, about the twelfth vertebra of the back, enters a little above the other inſertion; but the third, riſing from the third glandule, is to be ſeen near the eleventh vertebra, from whence it ariſes as a ſolitary branch, through the middle of the back, by the ſide of the aorta, and the vein *azygos*, between both, under the *œſophagus*, to which it is firmly knit by its membranes. Theſe milky thoracics, departing from the ſpinal (about the third or fifth vertebra of the back), through the midſt of which they crept all this way, turn a little to the left, and creeping up under the *œſophagus* and *aorta*, and under the ſubclavial artery and the glandules of the *thymus*, they go forward to the left *clavicula* and left axillary vein; they enter the vein juſt where the outward jugular pours itſelf forth into the axillary afore-mentioned. From hence we learn, that theſe thoracics carry the chyle out of the milky glandules or receptacles of the meſentery to the ſubclavials; but the *lacteæ meſeraicæ* carry the chyle from the inteſtines either to the receptacle or to the liver: alſo that the chyle goes not to the head nor to the joints, but is carried to the heart with the blood that runs down in circulation, where it is changed into the ſanguineous humour: and hence the lacteæ of the thorax receive their reſtorative force from nutriment, cordials, and medicaments, out of the ſtomach or *œſophagus*, by the *glandulæ lacteæ*, and carry them ſtraitway to the heart: whence it is, that drinking vinegar, wine, cordials, and other like things, ſo immediately cauſes the ſtrength to be reſtored; and preſently at meat a man is ſtrengthened, and his hunger ſtayed: this virtue is conveyed by the milky branch which is near the œſophagus, and the ſhort paſſage of the reſt of the lacteæ to the heart: alſo vulneraty potions and pectoral drinks come a ſhorter and ſurer way to the heart and lungs, to which, by the long way about through the bowels and veins, they could not come ſo ſafely and ſecurely; and by the ſame reaſon poiſons as ſwiftly overcome the heart, infect the vital ſpirits, and deſtroy their harmony.

The liver is an organic part, and an inſtrument of the blood, (both for generating and perfecting it,) ſeated in the abdomen, juſt under the *diaphragma* or midriff, in the right *hypochondrium*, about a finger's breadth diſtance therefrom; it is covered by the ribs for ſafety, but covers, or lightly reſts upon, a great part of the ſtomach. It is divided as it were into two parts by the umbilical vein, which, after the birth, ſerves it for a ligament. It is ſaid to be the original or beginning of the veins, becauſe therein the roots of the two greateſt veins appear diſperſed, viz. of the *cava* and *portæ*, as roots implanted in the earth; alſo here are to be ſeen inſerted, trunks and branches of the *vena lacteæ*, ariſing from the *pancreas meſenterii*. It is a great, thick, and hard, body; of a red colour, conſiſting of a ſubſtance proper to itſelf, fitted and ordained for that end. It differs from the livers of beaſts, in that it has ſeldom any lobes, yet the hollow part of it has a fiſſure or chink, where the umbilical vein is implanted. Its magnitude is exceeding great, beyond all the other *viſcera*; and bigger in man than in any other living creature, the proportion of body being conſidered; and this ſeems to be neceſſary, conſidering the noble uſes and functions to which it is ordained. The action of the liver is ſanguification; for the chyle, being conveyed to the liver by the *vena lacteæ*, is there ſanguified, or made *chymus*; for the ſubſtance of the liver doth not only ſuſtain the veins, but is alſo the efficient of ſanguification, and of perfecting the blood by its circular motion; and, together with the blood, it generates natural ſpirits.

The gall-bladder and choler-channel are ſituated on the right ſide of the liver, in the under or hollow part thereof. The branches of both theſe, together with the branches of the *vena portæ*, are comprehended in a common bladder, called *capſula*. Theſe branches of the *veſica fellis*, and *ductus choledochus*, or *biliarius*, being detained in the liver, are diſperſed through its whole *parenchyma*, every where included in the afore-named *capſula*, which is red, about the thickneſs of an artery, and takes its original from the peritonæum. The gall-bladder is a veſſel long and round, much like a pear, hollow, furniſhed with a double membrane. Its magnitude is ſmall, compared to the ſpleen or kidneys, being about two inches in length, and in ſome perſons nearly three inches. The uſe of the gall is, 1. to cauſe a new and more perfect fermentation of the chyle: 2. to prick the guts by its ſharpneſs, to ſtir up their periſtaltic motion, that they may drive down the chyle, and expel the excrements: 3. to mix with the chyle in ſuch proportion, that being converted into blood, the blood might thereby be kept from congelation.

To illuſtrate this ſubject more amply, we have ſubjoined a repreſentation of the liver of a new-born child, where A A A A repreſents the circumference of the liver; B B B B, the lower part of the liver, in which there are ſeveral irregularities; C, the gall-bladder; D, the umbilical vein, running with a ſingle trunk from the navel to the liver; E E E E, the ſinuſes of the vena portæ, into which alone the umbilical vein inſerts itſelf, with a ſingle trunk; F, the trunk of the vena portæ cut off; G G G G, the principal branches of the ſinus of the vena portæ diſtributed through the liver, which become conſpicuous when a ſmall part of the ſuperficies of the liver is abraded off; H, the trunk of the vena cava; I I, the canalis venoſus, or ductus venoſus, ariſing from the ſinus of the vena portæ, over againſt the ingreſs of the umbilical vein, and inſerting itſelf into the vena cava: this, in the uterus, carries a great part, and probably the greater part, of the blood, carried through the umbilical vein to the liver of the fœtus, by a large paſſage to the vena cava and the heart; but this, after the birth of the fœtus, gradually grows narrower and cloſes; K, the entrance of the umbilical vein into the ſinus of the vena portæ. To this deſcription of the external part of the liver, it may not be improper to add that of its blood-veſſels, together with their numerous ramifications, freed from the parenchymatous ſubſtance. Fig. 1. repreſents the under ſide of theſe veſſels; A being that part of the liver which lies next to the back; B, its right ſide; C, its anterior edge; D, its left ſide; E, the vena cava, where it paſſes through the diaphragm; E 1, E 2, E 3, its three principal branches, diſtributed almoſt through the whole liver; F, the vena portæ turned upwards, that other veſſels may be more eaſily ſeen; F 1, F 2, F 3, F 4, four branches of the vena portæ diſtributed to ſeveral quarters of the flat part of the liver, but the fifth branch is not obſerved on this ſide; G, the gall-bladder; H, H, the vena umbilicalis become a ligament; I, the ductus communis choledochus; K, the canalis venoſus, now performing the office of a ligament; L, the trunk of the vena cava deſcendens; *a*, a ſmall portion of the membrane inveſting the liver: *b*, that part of the diaphragm which ſurrounds the vena cava; *c*, the biliary duct; *d*, the cyſtic duct; *e*, the place where theſe veſſels meet; *f*, the hepatic artery; *o*, *o*, the hepatic nerves; *p*, *p*, *p*, *p*, the common capſula laid open; *q*, *q*, the lymphæducts; *m*, *m*, *m*, &c. the ſmaller branches of the vena portæ; *n*, *n*, *n*, the ſmall branches of the vena cava.

The *ſpleen*, or *milt*, is ſituated in the left ſide under the ſhort ribs, over againſt the liver, and under the midriff, between the ribs and the ſtomach, near to the back part. Its colour in new-born infants is red, becauſe they have been fed with elaborate blood; but in thoſe of ripe age it is of a darkiſh red colour, and ſometimes almoſt blackiſh. It is connected by thin membranes ariſing from the peritonæum, to the peritonæum itſelf, caul, and to the left kidney, and ſometimes alſo to the *ſeptum*, or *diaphragma*. The action and office of the ſpleen is not to be either the receptacle or the place of the generation of melancholy, (as ſeveral learned men have thought,) nor to make blood, (as many others have imagined,) but to highly perfect the blood already made, that it may ſerve as a fermentum, both to the daily generated chyle and all the reſt of the blood in the body: the excrementitious blood which cannot be ſeparated from the ſpleen, if it be thin and watery, is purged out, firſt, by the arteries, not only to the guts, but alſo to the kidneys, by the emulgent veins; hence, in diſeaſes of the ſpleen, the urine is many times black, in which caſe we commonly adminiſter diuretics. Secondly, by the ſtomach; whence, in the ſcurvy and a quartan ague, the ſick ſpits exceedingly; but, if this excrementitious blood be thick and earthy, it is voided directly by the anus by proper arteries going to the guts, by which means the ordure is black, as alſo by the internal hæmorrhoidal veins, as the great Hippocrates has often ſhewn.

The *reins*, or *kidneys*, are ſituated under the liver and ſpleen, by the loins, between the two coats of the peritonæum, at the ſides of the cava and aorta, under which very great nerves lie hid, and reſt upon the muſcles of the thigh: whence it is, that, a ſtone being in the kidneys, a numbneſs is felt in the thigh and leg of that ſide. The left kidney is for the moſt part higheſt; the right is loweſt to give way to the liver, reaching by its end the third vertebra of the loins. They conſiſt of a ſubſtance ſolid, fleſhy, thick, hard, and compact, almoſt as the heart, but not ſo fibrous. They are connected by an external membrane from the peritonæum to the loins and *diaphragma*; by the emulgent veſſels to the cava and aorta; and by the ureters to the bladder. The right kidney is tied to the cœcum, ſometimes alſo to the liver: the left to the ſpleen and colon; hence pains of the reins are exaſperated by plenty of wind and excrements. The colour of the fleſh of the kidneys is red; and through their hollowed ſides are carried the emulgent veins and arteries, proceeding from the trunks of the cava and aorta: they have alſo emulgent arteries, which are large, and derived from the trunk of the aorta, which carry blood for nouriſhment, and that therefrom the ſerum (which is plentiful in the arterial blood) may be ſeparated: they have alſo one very ſmall nerve on each ſide, which ſprings from the *ramus ſtomachicus* proceeding from the *par vagum*, and is inſerted into the proper membrane of the kidney;

whence ariſes the ſympathy between the ſtomach and reins; and that they who are diſeaſed in the kidneys, by the ſtone or ſome other diſtemper, are for the moſt part ſick at ſtomach, and troubled with vomiting. The uſe of the kidneys is to attract the ſanguineous ſeroſity by the emulgent arteries, that ſo the maſs of blood may be cleanſed: which blood, going through theſe veſſels, is always carried through the branches of the emulgents, diſſeminated abroad through the whole parenchyma of the kidneys, and runs at length into very ſmall paſſages, ſo that at laſt the wheyiſh humour is thruſt quite out into the fleſh of the kidneys, the good blood remaining partly to nouriſh them, and partly to return by the little emulgent veins, which are open into the cava, and ſo to the heart. The ſerous part is ſtrained through the papillary caruncles, which have holes into the branches of the ureters, and after grow together into one cavity or expanſion of the ureter, into which the ſerum is emptied: through the ureters it paſſes into the bladder, where it becomes urine.

The *deputy kidneys*, or black choler caſes, are ſo ſeated, that they reſt upon the upper part of the kidneys, on the outſide, where they look towards the *vena cava*, being covered with fat membranes. In figure and ſubſtance they for the moſt part reſemble the kidneys, ſave that their fleſh is a little looſer: ſo that they ſeem like little kidneys reſting upon the great ones. They have an apparent internal cavity furniſhed with a dreggy and black humour; and are ſtrongly connected, where they reſt, to the external membrane of the reins, and to the *ſeptum tranſverſum*, to which they commonly ſtick in diſſection.

The *ureters* are white veſſels, like veins, but thicker, whiter, and more nervous; conſiſting of a ſingle membranous ſubſtance, incloſed in a duplication of the peritonæum. They are as long as between the kidneys and bladder, and commonly as thick or wide as gooſe-quills: but, in diſſection of perſons troubled with the ſtone, they have been ſo wide as to admit of two fingers. Their original is in the kidneys, within whoſe cavities they are divided into nine or ten little pipes or channels, which are fitted to the little fleſhy teats or *carunculæ papillares*, that they may diſtil the ſerum into the pelvis, or baſon, or large cavities of the ureters within the kidneys. The ureters deſcending within the duplicature of the peritonæum, upon the muſcles of the loins, to the bladder, are inſerted obliquely into its neck; then, aſcending upwards between its membranes, they perforate the innermoſt coat together, and through the ſame hole they both enter the bladder: in the implantation of the ureters, two little membranes or valves are placed, like the valves in bellows, ſhutting up the paſſages of the ureters, ſo that the urine cannot go back. They receive ſmall veins and arteries from the neighbouring parts, and nerves from the *par vagum*, and marrow of the loins. Their uſe is to convey the urine from the kidneys into the bladder.

The *bladder*, or receptacle of urine, is ſeated between the duplicature of the peritonæum, in the cavity of the hypogaſtrium, which is called *pelvis*, or the baſon; which in a man lies between the *os pubis* and *inteſtinum rectum*; in a woman, between the *os pubis* and the neck of the womb. Its figure is oval or globical, that it might hold the more; from the bottom it is by little and little ſtraightened into a narrow neck. Its magnitude is various; and, according to the greatneſs of the lungs, ſuch is the greatneſs of the bladder; and ſuch animals as have no lungs have no bladder: man, according to his magnitude, has of all living creatures the greateſt bladder. Its ſubſtance is partly membranous, for ſtrength ſake, as alſo that it might extend and wrinkle together. It has two membranes and one muſcle, which moſt anatomiſts make to be a third membrane, and not a muſcle. The bottom is faſtened to the peritonæum, and to the navel by a middle ligament called *urachus*, and the two navel arteries dried up. The neck of the bladder is tied in men to the *inteſtinum rectum*; but in women to the *vagina uteri*, or neck of the womb, and to the neighbouring hip-bones. The bladder has three holes; two a little before the neck, where the ureters are inſerted, and a third in the neck, through which the urine is voided. The neck is fleſhy and fibrous, furniſhed with a ſphincter muſcle to purſe it up, that the urine may not paſs out againſt our will; in men this neck is long, narrow, and wreathed, becauſe, being placed under the bodies which conſtitute the yard, it runs upwards under the ſhare-bones, from the fundament to the origin of the yard. In women it is ſhort and broad, ſtretched forth downwards, and implanted above into the neck of the womb. The bladder has arteries from the hypogaſtrica in men, and from thoſe which go from the neck of the womb in women; by theſe it is nouriſhed; it has veins alſo from the vena hypogaſtrica implanted into the ſides of its neck, variouſly diſſeminated through the bladder, which are mutually conjoined one with another and with the arteries by open holes, that nutritive blood may return; and it has nerves from the *par vagum*, and from the *medulla* of the *os ſacrum*.

The ſpermatic veſſels, in men called *vaſa preparantia*, are two-fold, viz. the two ſpermatic veins, and the two ſpermatic arteries. The right-ſide vein ſprings from the trunk of the vena cava, a little below the riſe of the emulgent, otherwiſe it muſt go over the aorta, and then there would be danger of breaking; or, at leaſt, by reaſon of the pulſation of the artery, the venal blood might be hindered. Both the ſeminal arteries ariſe from the trunk of the aorta, about two inches diſtant from the emulgents; theſe veſſels, being a little diſtant one from another, are tied together by a thin membrane from the peritonæum. Theſe ſpermatic preparers are greater in men than in women, and the arteries are greater than the veins, becauſe very much heat, vital ſpirit, and arterial blood, are requiſite to make ſeed. Theſe veſſels are carried obliquely above the ureters to the groins; but in their progreſs they are joined by infinite anaſtomoſes or inoſculations: ſo that the arteries are ſo coupled within the coats of the veins, as if they were but one veſſel, and they are knit togegether by a membrane ariſing from the peritonæum, and afterwards carried to the beginning of the teſticles, like a tendril of a vine, being ſo interwoven that a curious eye cannot diſtinguiſh a vein from an artery. This intertexture of veins and arteries being the twiſtings of the vaſa preparantia, makes a long, thick, glandulous, but hard, cord, called *corpus varicoſum*, which is without any remarkable cavity. Theſe veſſels do not paſs through the peritonæum, as in dogs, but are carried between its double coat, with a ſmall nerve from the *par vagum* and the muſcle *cremaſter*, and, paſſing to the bottom of the teſticle, end at the *vas deferens*. Theſe arteries carry blood and ſpirits (in whoſe admirable windings they are more elaborated) to the teſticles, from whom they have a virtue ſeminal: with this blood the ſtones are nouriſhed, and part of it becomes ſeed: the veins are cloſely interwoven with the arteries about the teſticle, and joined to them by mutual anaſtomoſe; that they may carry back the blood which remains unto the left emulgent, or to the vena cava on the right ſide, from whence the ſpermatic vein commonly ſprings. If one or both the ſpermatic arteries be injured, or wanting, as they are ſometimes, ſuch perſons doubtleſs cannot get children, but muſt neceſſarily be barren.

The *teſticles* in men, are glandulous bodies, flaggy, ſpungy, ſoft, and white, without any cavity, full of ſmall veins and arteries, ſuch as are not in any other part of the body. Their figure is oval, but it ſometimes varies, according to the turgency of any of the neighbouring veſſels. The right teſticle is hotter, and better concocts the ſeed, than the left: becauſe the former receives the arterial blood immediately from the aorta, the latter from the emulgent. They are ſeated externally without the abdomen, under the belly, at the root of the yard, in the ſcrotum or covering: being commonly in men anſwerable to the bigneſs of a ſmall hen's egg. The membranes being taken away, the ſubſtance of the teſticle comes in ſight, upon which, athwart, is placed a ſmall body, called *corpus vermiforme*, to the one end whereof cleaves the *vas ſpermaticum deferens*, the carrying ſpermatic veſſel, which enters into the ſubſtance of the teſticle, and empties the ſeminal matter thereinto: from the other end ariſes the *vas ejaculatorium*, which in the beginning is full of turnings and windings, and cleaves firmly to the teſticle, by its ends, being looſe, and ſeparate in its middle. They have veſſels of all ſorts, veins and arteries from the ſeminal veſſels, and a large nerve from the *par vagum*: ſometimes alſo they have two nerves from the twenty-firſt pair of the ſpinal marrow, which, being conjoined with the ſpermatic veſſels, are carried with them through the production of the peritonæum, and diſſeminated into the tunicles. They have on each ſide one proper muſcle, called *cremaſter* or *ſuſpenſor:* and a common muſcle, from the membrane of the ſcrotum, called *dartos.* The teſticles have alſo ſeveral tunicles, coats, or coverings; of which two are common: three proper to themſelves only. The firſt common coat (which is to defend the part) is conſtituted of the ſkin and ſcarf-ſkin, and is called ſcrotum or *burſa ſcroti,* becauſe it is like a purſe or bag: it is ſoft, wrinkled, and void of fat: having in its lower part a line, according to the length thereof; which divides into a right and left part, and is called *ſutura,* or a ſeam. The ſecond common coat conſiſts of a fleſhy membrane, ſpringing from the *membrana carnoſa,* which is here thinner than in other places, and full of veins and arteries, and is called *dartus:* this by many is comprehended under the term ſcrotum. The firſt proper coat is called *vaginalis,* the ſcabbard coat; and *elicoides,* from its thinneſs, which is yet ſtrong and full of veins, ariſing from the proceſſes of the peritonæum, and cleaving to the *dartos* by many membranous fibres, whence its exterior part is rough, its interior ſmooth. The ſecond proper coat is called *erythroides,* becauſe of its redneſs: it has ſome fleſhy fibres from the *cremaſter,* from which it is propagated, and is ſpread over the *vaginalis.* The third and innermoſt, called *albiginea,* ariſing from the coat of the ſpermatic veſſels, immediately encompaſſes the ſubſtance of the ſtones, and as it were binds the ſame, being white, thick, and ſtrong. The uſe of the teſticles is to elaborate the ſeed, and to make it, by their heat and inbred faculty: for the efficient cauſe of the ſeed is the proper parenchyma of the teſticles, both in regard of their hot and moiſt temper, and of their ſpecific property; for, the blood being prepared, they convert it into ſeed; what remains over and above ſerves for nouriſhment of the part, and the remainder is conveyed back, by the ſpermatic veins, to the heart.

The *vaſa deferentia* are the veſſels carrying away the ſeed; and theſe begin at the teſticles, and end at the root of the yard, whither they carry and ejaculate the ſeminal humour; being in number two, on each ſide one. Now theſe *vaſa deferentia,* called alſo *meatus ſeminales,* are divided into three parts; the beginning, middle, and end: under which are comprehended, the *paraſtrate,* the *vaſa ejaculatoria,* the *veſiculæ ſeminales,* and the *proſtatæ.* The *paraſtratæ,* or aſſiſtants, are the beginnings of the *vaſa deferentia.* Their ſubſtance is of the middle nature, between that of the teſticles and that of the *vaſa ejaculatoria,* being within glandulous and ſpungy, but without membranous. They have their origin in the ſtones, making many anaſtomoſes there, with the *vaſa preparantia,* by means of innumerable ſmall pipes, or white fibres. The uſe of the *paraſtratæ* is to perfect and finiſh the ſeed, by a virtue which they receive from the teſticles, and, while the ſeed is lodged in them, frequent luſt is not provoked. The *vaſa ejaculatoria* are the middle of the vaſa deferentia, properly ſo called; theſe convey the ſeed from the paraſtatæ or corpora varicoſa to the veſiculæ ſeminales. Their ſubſtance is white and nervous: their figure long and round, with an obſcure cavity or hollowneſs: their ſituation is partly in the teſticles, partly in the cavity of the abdomen, above the os pubis or ſhare bone; for they run upwards and are knit to the vaſa preparantia by a thin membrane, and ſo are carried along to the flanks and ſhare-bone, which for that purpoſe have a ſlight cavity. After being turned back downwards, they paſs above the ureters, and under the hinder part of the bladder; above the *inteſtinum rectum*, at the neck of the bladder, they are on each ſide widened, and there conſtitute the ſeminal bladders. *Veſiculæ ſeminales*, the ſeminal bladders, are the end or termination of the vaſa deferentia: after the conſtitution of theſe bladders, theſe carrying veſſels are united into one ſmall paſſage, and are inſerted into the proſtatæ. Theſe bladders are many in number like little cells, and ſeem to make on each ſide one remarkable great and winding one, for that they go one into another, much reſembling a bunch of grapes. Their ſubſtance is nervous, and they are ſeated between the ligaments of the bladder and the rectum, by the ſides of the vaſa ejaculatoria a little before the ſaid veſſels grow thick and unite. Their uſe is to contain the ſeed being perfected, and to reſerve the ſame till the time of coition, that ſo there may be a ſufficiency for generation. The *proſtatæ*, ſtanders before, ſtoppers, or conductors, are two certain caruncles (in which the vaſa deferentia terminate) manifeſtly differing from the veſiculæ ſeminale in uſe, form, ſituation, and magnitude. Their ſituation is at the root of the yard, above the ſphincter of the bladder, on each ſide at the neck thereof. Their ſubſtance is ſpungy, yet harder and whiter than any other kernels, and they are alſo covered with a thicker membrane, being of exquiſite ſenſe, that they might cauſe pleaſure in coition. They are flat before and behind, but round on the ſides: their magnitude is uſually as big as a walnut, and they are open by certain pores into the urethra or urinal paſſage, which is evidently apparent in ſuch as have died of a gonorrhœa, where they have been dilated, and in whom the ſeat of that diſeaſe did lodge. Their uſe is to contain a viſcous and ſlippery humour, to moiſten the urethra, for the more eaſy and ſpeedy paſſage of the ſeed; and they alſo ſerve to ſtay the involuntary effuſion of the ſeed, and to hinder its regurgitation being once emitted. They terminate in a ſmall caruncle upon the urethra, which as a valve ſerves to hinder the coming of urine into them: under and by this caruncle, on each ſide, there are inconſpicuous holes, or pores, through which the ſeed paſſes into the urethra, juſt as quickſilver paſſes through leather, which it does by virtue of its being replete with a vaſt quantity of ſubtil and penetrating ſpirits. In theſe pores of the proſtatæ, and in the ſeminal bladders, the ſeat of a virulent gonorrhœa lies; and therefore, if they be broken, hurt, or dilated, either by a catheter putting into the bladder, or by any other means, there follows immediately an incurrable gonorrhœa. The diſtance between the root of the ſcrotum and the podex is called *perinæum:* this, as well as the pubes and ſcrotum, is furniſhed with hair, becauſe glandules are placed here which abound with plenty of humidity, a part of which they ſend to the ſkin for the generating thereof.

The *penis*, or yard, is an organical part, long, and roundiſh, but broader on the upper ſide than where the urethra is, being the male inſtrument of generation, and appointed for the evacuation of the ſeed and urine. It is ſeated under the os pubis, exactly in the middle, becauſe it is only one in number. Its magnitude is extremely various in different ſubjects, being for the moſt part larger than ordinary in little men; alſo in ſuch as have large noſes, for the proportion of the yard very much anſwers that of the noſe; in ſuch as have thick, full, large, beards; and in Ethiopians, or blackamoors. It conſiſts of a ſcarf-ſkin, fleſhy membrane, and a proper ſubſtance of its own; but is void of fat even in the fatteſt men, leſt thereby its moſt exquiſite ſenſe ſhould be dulled. Its proper ſubſtance is four-fold: firſt, the urethra; ſecondly, the glans; thirdly and fourthly, the two nervous bodies, one on each ſide. The *urethra*, or paſſage of the urine and ſeed, is a pipe of a nervous ſubſtance, of the ſame bigneſs from the neck of the bladder (to which it is joined) to the end of the yard, or beginning of the glans, for in the middle of the glans it has a greater hollowneſs. Its ſubſtance alſo is thick, looſe, and ſoft, like that of the two lateral ligaments or nervous bodies. This urethra has alſo two membranes, and a ſubſtance proper to itſelf. The one membrane is internal, thin, and of exquiſite ſenſe, with which alſo the glans is covered; this ſprings from the thin membrane which clothes the nerves of the yard: the other is external, more thick and fleſhy, and furniſhed with nerves: the middle part, which is its proper ſubſtance, is looſe, ſpungy, and black, that it may be diſtended or contracted with the other parts. In the beginning of its channel are theſe pores through which the ſeed is ejaculated, as alſo a little membrane or caruncle like a valve ſtretched before it, to keep the ſeed and urine from returning into the ſpermatic veſſels: if it be broken or eroded by ſharp humours, or the unſkilful uſe of a catheter, there follows an incurable gonorrhœa. Its uſe is to be the common paſſage of the urine and ſeed. *Balanus*, glans, the head or nut of the yard, is an hollowed kernel, wider in the middle than at the external orifice: of a globular form, even, and compaſſed with a circle or crown. Its ſubſtance is fleſh, more ſolid than the reſt of the yard, of a moſt exquiſite ſenſe, and covered with an exceeding thin membrane, ſoft and red. It is covered with the reduplication of the external ſkin of the yard called *preputium*, (a *putanda*, from cutting off,) the foreſkin: this is that which the Jews cut off in circumciſing.. This ſkin is tied at the root of the glans, by a certain ligament, called *frænum*, the bridle, ariſing from a combination of the tendons of the muſcles of the yard and a nerve, terminating in the extreme hollowneſs of the nut. The two nervous bodies, or hollow ligaments, one on each ſide, conſtitute the remaining and greateſt part of the yard; the whole ſubſtance whereof being like a thick ſpungy artery, ſtuffed with fleſh. Their external ſubſtance is long, thick, compact, hard, and nervous; their internal ſubſtance is ſpungy, thin, hollow, of a net-like texture, framed of innumerable twigs of veins and arteries, of a dark-red colour, inclining to black, and filled with a great abundance of black blood, very full of ſpirits, which, waxing hot, cauſes a diſtention and erection of the yard. Theſe two bodies (where they are thick and round) ſpring from the lower parts of the ſhare-bone, or hip-bones, to which they are ſtrongly tied with two ligaments. In their beginnings they keep ſome diſtance, being ſeparate one from another, almoſt like a Y, that the urethra may paſs between them; but, when they ceaſe to remain perfectly ſeparate, viz. when they come to the joining at the ſhare-bone, they loſe near a third part of their nervous ſubſtance; yet they ſtill remain diſtinct by the coming between of a ſingle membranous partition, called *ſeptum lucidum*. This membrane is white, thin, tranſparent, and full of nervous fibres; it ariſes from the upper part of the commiſſure of the os pubis, and upholds the ſaid two lateral ligaments, and the urethra, as a ſtay, the like of which is alſo found in women. The yard has all ſorts of veſſels, as veins, 1. external, running up and down in the ſkin, from the pudenda; 2. internal ones, from the venæ hypogaſtricæ, which are ſpread through its whole body. It has arteries, two internal remarkable ones, ariſing from the hypogaſtrica, which are inſerted into the beginning of the growing together of the two nervous bodies, which are ſcattered up and down according to the length of the part: but in the middle, where the ſeptum lucidum is thinneſt, they ſend branches through the ſpaces of the fibres, the right artery, into the left nervous body, and the left into the right, carrying ſpirits and blood to fill up, erect, and nouriſh, the yard. It has two nerves from the marrow of the *os ſacrum*, which diſſeminate themſelves through all parts of the yard, both internal and external; aſcending through the middle of the forked diviſion, they ſpread themſelves into the muſcles, the whole body of the yard, and the glans, that there might be an exquiſite ſenſe and delectation. It has alſo four muſcles, two erectors, and two accelerators or ejaculators, under which muſcles lie hid the two nervous bodies.

The ſpermatic veſſels in women are the ſame with thoſe in men, and agree in their number, nature, original, and office; but they differ from thoſe in men in the following things: firſt, they differ in their longitude; in women they are ſhorter, by reaſon of the ſhortneſs of the paſſage, but they have more wreathings, windings, and turnings, where they make the corpus varicoſum about the teſticle, that the ſeed may have a ſufficient ſtay for its due preparation; ſecondly, in their inſertion; in women they paſs not whole to the teſticles, as in a man, but are divided in the midway: whence the greater part goes to the teſticles to form the corpus varicoſum; the ſmaller part to the womb, into whoſe ſides it is diſſeminated, eſpecially to the upper part of the bottom, to nouriſh the womb, and the child therein; and that by thoſe veſſels ſome part of the menſtrual blood may be purged forth in ſuch as are not with child. This ſmaller part is tripartite, being divided below the teſticle into three branches, of which one runs out into the womb, as aforeſaid: the ſecond is diſtributed to the *vas deferens*, or trumpet of the womb, and to the round ligament: the third creeps along the ſides of the womb, inſinuating itſelf among the venæ hypogaſtricæ, with which and the arteries they are joined by anaſtomoſes: thirdly, the ſpermatic veins receive the hypogaſtric arteries as they paſs by the ſides of the *uterus*, that the blood might be the better elaborated; and they are intermixed with many wonderful *anaſtomoſes* for the preparation of ſeed.

The teſticles in women differ from thoſe in men in theſe following things: 1. in ſituation, for theſe are placed within the hypogaſtrium, about two inches above the bottom of the matrix, in ſuch women as are not with child, being tied by certain ligaments: 2. in magnitude, for theſe are leſs than the teſticles in men; for by reaſon of their heat they are contracted after the woman is fourteen years of age; whereas, before that age, they are more large, being full of white juice: 3. in their ſurface, for theſe are more uneven than thoſe of a man: 4. in their figure, for theſe are more broad and flat on the fore and hinder parts; they are alſo more hollow, and fuller of ſpermatic moiſture: 5. in their ſubſtance, being ſofter, and, if you take off the membrane, you will find them conglomerated or knobbed together of divers little kernels or bladders, five or ſix, or more, which contain the thick ſeed: 6. in their membranes or coats, for, whereas men's have four tunicles, theſe have but one, becauſe they are in a cloſer and warmer place; this ſingle coat is called by Galen *dartos*; but, where they receive the ſeminal veſſels, they are half covered over with the peritonæum: 7. in their connection, for they are knit to the ſides of the uterus by two manifeſt paſſages, viz. by the two upper ligaments, which are looſe and membranous, and out of which, in the time of coition, the ſeed is caſt: 8. in their appendices, theſe having no paraſtatæ, nor any cremaſters; but are ſtayed by the broad lateral ligaments, called the bat's wings. Their uſe is, the ſame as in man, to make, elaborate, and perfect, the ſeed.

The *vaſa deferentia*, in women, ſpring from the lower part of the teſticles, and are either inſerted with a very ſhort paſſage into the bottom of the womb, or diſſeminated at the trumpets of the womb, with ſundry exceeding ſmall ſprigs, not much unlike the vena lactæ, ariſing from the vaſa præparentia, and continued with them, though here changing their name and uſe. Their ſubſtance is firm, white, and nervous. They paſs by the membranous ligaments to the matrix, nor ſtraight, but wreathed or twining, with a multitude of windings; that the ſhortneſs of the way might be recompenſed by ſuch a labyrinth. Near the teſticles they are broad, afterwards they become narrower, and ſmaller, and about the womb they become broad again, and are inſerted into the cornua, and capacity of it. Their uſe is partly to carry the ſeed to the trumpets of the womb, to be there farther perfected, and better elaborated, and to be kept for uſe: and partly to carry it to the bottom of the womb, where another branch runs into the neck, by which way alſo the ſeed is voided, cauſing (by reaſon of the length of the way) the greater delectation. The *tubæ fallopianæ* (ſo called from their likeneſs to a trumpet of war) are two in number, one on each ſide, of a nervous, white, thick, and hard, ſubſtance; and of a figure long, round, and hollow. Theſe Spigelius calls vaſa cœca, becauſe they have but one orifice. They ariſe from the bottom of the womb, at one end; and, when they have gone a little therefrom, they grow broader by little and little, criſping themſelves like the tendrils of a vine, till they come towards their ends. Then, diſmiſſing their wrinkled criſpations, and becoming very broad, they end in a certain extremity which ſeems membranous and fleſhy by reaſon of their red colour, and at laſt become very torn and jagged, having large holes which lie always ſhut, thoſe jagged ends ever falling in upon them, which notwithſtanding, if they be opened and widened, repreſent the broad end of a brazen trumpet. They paſs obliquely from the cornua over againſt the teſticles, being carried by the membranous ligament, and (as it were) half compaſs the teſlicles, but are diſtant from them every where about half an inch, they neither proceeding from the ſtones nor being inſerted into them; and, as in their beginnings they are open, ſo in their endings they are ſhut up and blind, not reaching to or being inſerted into any other part. They are commonly faſtened by very thin membranes, not much unlike the wings of bats or flitter-mice, through which many veins and arteries are diſſeminated from the teſticles into their hollowneſſes; by which the ſeed is conveyed from the teſticles into theſe tubæ or trumpets. Their inſertion at the bottom of the womb is large, whence ſprings a nervous pipe, ſtretched out nearly to the middle of the trumpet, that by it the ſeed may be ſent into the bottom of the womb: their middle is capacious, with certain little cells or bladders, containing white ſeed; after which they are wreathed and criſped: their end and is narrower again, and blind as aforeſaid. Now, what the *veſicæ ſeminales* are in men to preſerve the ſeed, ſuch are theſe blind paſſages in women: for they are annexed to the teſticles by the aforeſaid little membranes, through which many little veins paſs, and by which the concocted ſeed is carried, and here laid up as in a ſtorehouſe, where alſo, by the irradiation of the virtue of the teſticles, it is yet better digeſted, and made more perfect; from whence, in the time of coition, it is by the *cornua* ſent into the cavity of the womb.

The *uterus matrix*, or womb, is an organical part, the receptacle both of the ſeed and of the child: and it is ſituate in the middle of the *hypogaſtrium*, called *pelvis*, the baſon, by the *os ſacrum* and flank-bones, between the *inteſtinum rectum* and the bladder. Its magnitude, even in virgins of big ſtature, exceeds not the bigneſs of a walnut: but in women with child it dilates itſelf into ſuch a capacity as to contain the child: nature made it at firſt ſmall, that it might embrace the yard, and cheriſh the ſeed, becauſe it is but little in quantity. Its figure is ſaid to reſemble a pear: but the neck thereof reſembles an oblong and round pipe or channel. Its connection is either by the neck or the bottom: the neck is knit by its own ſubſtance, and by membranes; but the bottom by peculiar ligaments. On the fore ſide the neck is joined to the *veſica* and the *os pubis*, by membranes from the *peritonæum*; on the hind ſide, to the *os ſacrum* and *inteſtinum rectum*; but about the *vulva* it grows together with the anus; on the ſides it is looſely joined by membranes to the *peritonæum*. The *fundus* or bottom is not tied by its ſubſtance, but is free; but in its ſides it is faſtened by two pair of ligaments, which keep the womb ſuſpended or hanging looſe. The upper pair is broad and membranous, which are joined to the *os ilium*, and end in the bottom, near the *cornua*: they are ſoft and looſe, that they may diſtend or contract; and by *Aretæus* they are likened to the wings of bats: if theſe ligaments or muſcles be looſened or broken, by difficult labour or other violence, it may cauſe the falling down of the womb. The two lower ligaments are red like muſcles, and round like earth-worms, and pervious to the clitoris, from whence, (like a gooſe's foot,) deſtitute altogether of their hollowneſs, they ſpread themſelves upon the fore part of the thigh. Theſe ariſe from the ſides of the bottom of the womb, touching at their beginning the *vaſa deferentia*; then, aſcending to the groins, they paſs through the productions of the *peritonæum* and the tendons of the oblique deſcendant muſcles of the belly, and are partly obliterated in the membranes of the bones near the clitoris, where they are joined, degenerating into a broad nervous thinneſs, almoſt like a gooſe's foot, as aforeſaid; and partly run through the inner part of the thigh to the knee: hence it is that women in their firſt months going with child complain of a pain in the inſide of their thighs. The ſubſtance of the womb is membranous, that it may be diſtended or contracted as need ſhall require: it is full of wrinkles, which in women impregnated are extended to widen the womb, which after excluſion of the child, as alſo in age, are again contracted. The membranes of the womb are two, one common, the other proper. The common is doubled, and grows to the ſides on each hand: it ariſes from the peritonæum, and is exceeding thick, firm, ſtrong, ſmooth every where except where the ſpermatic veſſels enter, or the ligaments go out. The proper and internal membrane is alſo double, between both which there are fleſhy fibres, ſuch as are found in the ſtomach, with alſo here and there a kind of ſpungy ſubſtance. The womb has veins and arteries accompanying one another, which are carried between the tunicles or coats thereof, and caſt out their blood into its membranous pipes, but not into its innermoſt cavity: theſe veſſels ariſe from above and beneath, viz. from the upper and lower parts of the body; for the blood ought to come from the whole body, that the whole may by the monthly terms be purged, and that, in the time when a woman is impregnated, the child might be nouriſhed. Thoſe which deſcend from above run all the womb over, eſpecially in the fundus or bottom, being derived from the ſpermatic veſſels, or thoſe by which the vaſa præparentia are conſtituted, as alſo from the hæmorrhoidal branch, whence is the great conſent between the womb and the ſpleen: the left ends alſo of the veins and arteries are joined with the right ends, that the right ſide may be ſupplied with plenty of blood. Through the arteries (in women not with child) the menſtrual blood always flows: what is not thus evacuated returns back again to the heart by the veins, which are joined to the arteries by many anaſtomoſes. The veins and arteries that come from beneath, which are larger than the former, ſpring from the *ramus hypogaſtricus* of the *cava* and *aorta*, and, running through the neck of the womb and lower part of the bottom, are every where joined with the ſuperior ones by manifold anaſtomoſes. The mouths of theſe veſſels enter into the cavity of the fundus, which, in the time of the flowing of the terms, are opened, and gape, and, becauſe they reſemble cups or ſaucers, are called *acetabula* or *cotylidones:* to theſe, when a woman is with child, the *placenta* is joined, which receives the blood for nouriſhment thereof. And, becauſe theſe branches are carried to the neck of the womb, by them women which are with child ſometimes alſo void their courſes. It is furniſhed with many nerves from the *par vagum*, and the nerves of the os ſacrum, which run to the os uteri and parts about the *vulva* for delectation ſake, and to the lower part of the fundus, as alſo to the upper part thereof, where they are interwoven like a net; hence ariſes the great ſympathy between the womb and the brain. The uſe of the womb is to attract, receive, retain, preſerve, and cheriſh, the ſeed, in order to conception: and after conception to contain and nouriſh the fœtus till the time of birth. The ſhort neck of the womb, which is its inner neck, is that which contains the orifice, leading immediately into the cavity of the womb; this orifice is a hole not large, but ſuch as may admit a probe or large quill, and like a mouth may be dilated or purſed in; this entrance is but a tranſverſe line, which when it is exactly opened becometh round: this hole after conception is ſo cloſely ſhut, that it will not admit the point of a bodkin; but at the time of delivery, it opens itſelf wide according to the magnitude of the infant, be it ever ſo great. The cavity of the neck is rough, ariſing from wrinkles, whoſe edges tend inwards, leſt the ſeed which has been caſt in ſhould flow out again, as is ſeen in ſuch barren women as have the ſlipperineſs of the womb. The *fundus*, or bottom, is the moſt capacious part of the womb, ſeated above the os pubis, that it may be there diſtended. The external ſurface of the womb is ſmooth and even, covered as it were with a kind of humidity: its inner ſurface is full of poroſities, which are mouths through which, in time of a woman's breeding, blood paſſes out of the veſſels of the womb, to nouriſh the child. Within the orifice of the inner neck grows a caruncle, which exactly ſhuts the hole; in which caruncle are to be ſeen pores which ſeem to be at the end of the *vaſa deferentia*, terminating at the neck. This neck of the womb is opened in ſuperfœtation, in an abortion, in an ejection of a falſe conception, but eſpecially after a wonderful manner at the time of child-birth, when it is widened according to the magnitude of the child: at this (ſaith Galen) we may wonder, but we cannot underſtand it: therefore it is our duty to acknowledge the wiſdom and power of him that made us. The external or greater neck of the womb, called *ſinus pudoris*, is a long channel, hollow, (even while the child is in the womb,) and ſituate between the vulva and internal orifice of the womb, being that paſſage which receives the penis in coition. Its figure is long, (nearly ſeven inches,) hollow, (large enough to entertain the penis,) and wrinkled within: but its length and wideneſs are hardly determinable; ſome ſay it is as wide as the inteſtinum rectum, but it is longer or ſhorter, wider or narrower, according to the luſt of the woman, the penis being always in coition cloſely embraced by it. Its ſubſtance is a hard and nervous kind of fleſh, and a little ſpungy like the yard, wrinkled within (chiefly in its upper part) that it might be occaſionally dilated. Laſtly, towards the middle or external part of this greater neck, in the fore and upper part, near the vulva, is the inſertion of the bladder into ſight, that from thence the urine may be voided by the meatus urinarius, which is ſhort and ſtraight, but dilatable; it is without covered with a fleſhy ſphincter, but within black, and of the ſame ſubſtance with the urethra in men.

The membrane called the *hymen* is the ſign or flower of virginity, becauſe it can be found in none but virgins: it is called the flower of virginity from the blood which flows in the firſt act of coition. That there is ſuch a thing is not to be doubted; it was the legal ſign of a virgin among the ancient Hebrews, as Moſes has at large declared, Deut. 22. Secondly, it was a received and known thing in all the eaſtern countries, as Leo Africanus affirms; and the greateſt anatomiſts conclude, that in virgins who have uſed no violence to the part, nor have it fretted, eaten, or broken, by any defluxion of ſharp humours, it is never wanting. What it is, we now come to enquire into. Firſt, ſome ſay, it is a tranſverſe membrane, and they are indeed in the right: but they who would have holes in it, like a ſieve, are deceived. Secondly, others ſay, it is a tranſverſe membrane, going acroſs the neck of the womb, a little above the neck of the bladder, which reſiſts the firſt entrance of the penis. Thirdly, Sebizius ſaith, that, if this membrane is abſent, we muſt reſt in the ſtraightneſs of the neck and other marks, which being widened in the firſt coition, pain and effuſion of blood follow, by reaſon of the ſolution of the continuity. Fourthly, Severinus Pinæus (whoſe opinion is the neweſt of all) ſaith, that the four myrtle-ſhaped caruncles, tied together by a ſmall membrane, placed in the outer part of the neck of the womb, are the true hymen ſo much ſought after; and without doubt Pinæus is in the right: to this Bauhinus agrees; and Bartholinus ſaith, that he could find no other in a young girl carefully diſſected. It is ſituate in the neck of the womb, juſt behind the inſertion of the neck of the bladder, or a little more inwards: but its ſituation does now and then vary a little: there this membrane goes acroſs the cavity, much like the diaphragma, or midriff. As to its figure, it has an hole in its middle, big enough to receive a pea, by which the menſtrual blood paſſes: if it be without any hole, ſo that the courſes cannot flow, thence come diſeaſes, and (if it be not opened) at laſt death. It is connected orbicularly to the neck of the womb, as if it grew out of the ſame, where it is thicker than in the middle: its ſubſtance is partly membranous, partly fleſhy, yet not very thick: it is interlaced with many little veins, which being broken in the firſt coition, pain and bloodſhed follow, even as they do in ſome men, where the frænum or bridle of the penis (being exceeding ſhort and ſtraight) is torn or rent aſunder. Its uſe is to defend the internal parts from injury; as alſo to be the ſign of virginity.

The *vulva* is the external privity, which is that which offers itſelf to ſight before diſſection, being located under the fore-region of the os pubis. The more principal internal parts are the wrinkled chinks, the four myrtle-ſhaped caruncles, the orifice of the urinal paſſage, and the clitoris: the more external parts are the wings, the lips, the great chink, and the pubes, or hairy part. The wrinkled and inward chink is the immediate mouth of the larger neck of the womb, lying behind the myrtle-ſhaped caruncles: it is of a reaſonable largeneſs, and framed by nature to ſtay the ſeed caſt into the neck from too quickly ſlipping out. The myrtle-ſhaped caruncles are placed ſo as to appear in a quadrangular form, one at each corner: one of them is placed before or above in the circumference of the hole of the urinary paſſage to ſhut the ſame, it being largeſt and forked, that it might receive the end of the meacus urinarius, and hinder external things from entering: the ſecond is oppoſite to the former, and is ſituate below: the two remaining ones are placed collaterally: their figure reſembles a myrtle-berry: their magnitude is various in different ſubjects; their ſubſtance is framed of the reduplication of the fleſhy neck of the womb, being partly fleſhy, partly membranous: they are connected with membranes or valves:. their uſes are for titillation in the time of coition, and alſo immediately to ſhut the orifice of the neck, that air, duſt, nor any other matter, may enter. The orifice of the urinal paſſage, is a hole under the clitoris above the neck: through this women make water, and it ſeems to be ſhut with a kind of fleſhy valve. The clitoris is called by ſome *nympha*, by others *tentigo*, by others the woman's yard, becauſe it reſembles a man's yard in figure, ſubſtance, compoſition, repletion with ſpirits, erection, and ſituation. Its figure is ſomewhat like the glans and præputium of the penis; but it is commonly ſmall, being ſeated in the middle of the os pubis in the upper and former end of the foſſa magna, where the alæ or nymphæ meet; but in its beginning for the moſt part it lies hid under the nymphæ, and afterwards ſticks out a little. Its ſubſtance is like that of a man's yard, conſiſting of two nervous bodies, hard and thick, but within full of a black ſpungious matter, as in the lateral ligaments of the yard. The two lateral ligaments ariſe from the internal knob of the iſchium: the third is between theſe, ſpringing from the joining of the os pubis. Its muſcles are the ſame in nature and number with thoſe in a man. Its extremity is the glans, which has a ſuperficial hollowneſs, but not bored through; this is covered with a very thin ſkin as a preputium, which ſprings from the joining of the nymphæ. It has veins and arteries, common to it and the privity, and a nerve from the par vagum, larger than its body might ſeem to require, to give it an exquiſite ſenſe, and cauſe erection. In this is the ſeat of delectation and luſt. The *alæ* or *nymphæ*, commonly called wings, appear when the two lips are ſevered, being two productions made of a ſoft and ſpungy fleſh, and the reduplication of the cutis, and ſituated at the ſides of the neck between the two lips: being joined above, they compaſs the clitoris: they are in number two; in colour red like a cock's gills; in figure almoſt triangular, but much reſemble a cock's comb; in ſubſtance partly membranous, partly fleſhy. Their uſe is the ſame with the caruncles, as alſo to convey the urine ſtrait out, that it might not wet the lips. The *labia*, or lips, are two in number, by which the internal parts are covered: they are conſtituted to the common teguments of the body, and a great deal of ſpungious fat: the lower joining of theſe lips is in virgins ſomewhat ſtraight, and ſeems of a ligamentous ſubſtance for firmneſs, but in married women it is looſe, and in ſuch as have had a child ſtill looſer. The *foſſa* or *rima magna*, begins at the os pubis, and is not much above an inch diſtant from the anus, which being much larger than the inner chink, or cavity of the neck of the womb, this is ſeen as ſoon as ever the lips are drawn aſide: in the foſſa the lips being opened, two holes appear, (but ſcarcely viſible,) out of which a whitiſh or wheyiſh juice iſſues. In this foſſa, are alſo two collateral chinks, the right and left, which are between the lips and the wings. The *pubes*, called alſo *monticuli veneris*, is the part where the hair grows, and is properly termed the privity: being longiſh hillocks, ſoft, and of a ſubſtance the like whereof is not to be found again in the whole body, being partly ſkin, partly ſpungy fleſh, placed upon a portion of hard fat.

The membranes infolding the child in the womb, are the firſt things which are bred in the womb after conception, to defend the more excellent part of the ſeed: their efficient cauſe is the formative faculty, joined with the heat of the womb: theſe in human kind are in number only two, viz. the *amnios* and the *chorion*, to which latter belongs the *placenta* or womb-cake. All theſe together make that which we call ſecundine, or after-birth. It is ſo called, becauſe it is the ſecond habitation of the child next the womb; and alſo becauſe it comes away by a ſecond birth, after the child or firſt birth. *Amnios* (from its ſoftneſs and thinneſs) is the firſt membrane; it is the thinneſt of the tunicles, white, ſoft, tranſparent, and furniſhed with ſome few ſmall veins and arteries, which are diſperſed within its foldings. It compaſſes the child immediately, and cleaves almoſt every where to the chorion, eſpecially at the ends; and is united in the middle thereof, about the placenta, where the vaſa umbilicalia come forth, but is eaſily ſeparated from the chorion. It contains within it plenty of humidity and humours, in which the child does as it were ſwim, that ſo, 1. the child, floating therein, may be the higher, and leſs burthenſome to the mother. 2. That the child may not ſtrike againſt any of the neighbouring hard parts. 3. That the membranes being broke, and this humour running out at time of birth, makes the child's way, through the neck of the womb, ſmooth, ſlippery and eaſy. This humour, thus falling, is what midwives call the breaking of the water. Part of the amnios, does now and then hang about the head of the child, and then the infant is ſaid to be born with a caul: ſome take this for a preſage of good, ſome of evil, ſome of ſhort life, ſome of long, but it has relation to none of theſe things, for it has been found on the heads of both happy and miſerable, and of both ſhort and long lived, perſons. *Chorion* is the ſecond membrane, and compaſſes the child like a circle: this immediately compaſſes the former, and lies beneath it, whoſe inner and hollow part it invelopes, extending itſelf according to the magnitude thereof: it is with ſome difficulty ſeparated from the amnios, and ſtrongly bears and unites the veſſels to the placenta. That ſide next to the child is ſmooth and ſlippery; the other ſide is fixed immediately to the womb by the ſaid placenta, which is commonly on the upper and fore ſide: it does not encompaſs the whole child, being conſtituted of an innumerable company of veins and arteries, between which blood out of the veſſels ſeems to be ſhed. The *placenta uteri*, or womb-cake, (becauſe of its ſhape,) is a round maſs of fleſh, furniſhed with divers veſſels, through which the child receives its nutriment. Its ſubſtance ſeems to be conſtituted of an infinite number of little fibres, with congealed blood interpoſed. It has veins and arteries running through it from the umbilical veſſels, which are at length loſt about the edges of the placenta, making wonderful contextures, and cloſely knit to the ſubſtance thereof, being joined together by various anaſtomoſes, through which the blood in the child runs back out of the arteries into the veins. It is, firſt, to be a ſupport to the navel veſſels under which it lies: ſecondly, to prepare blood to nouriſh the child, as the true liver does in grown perſons. This blood it ſucks out of the veins of the womb, and, preparing it for uſe, ſends it through the greater umbilical vein to the liver of the child, that ſo it may be carried to the heart, out of which it is ſent by the arteries into the whole body of the child for nouriſhment.

The umbilical or navel veſſels (ſo called, becauſe, the child being excluded, they are all found to centre in its navel) are in number four, viz. one vein, two arteries, and the *urachus*; all which are covered with one common membrane or coat, which both incloſes all thoſe veſſels, and diſtinguiſhes them one from another, that they might neither be entangled or broken. The navel vein, paſſing through the two coats of the peritonæum, is inſerted into the liver by a cleft, going through the navel, ſometimes ſingle and ſometimes double. It is about five feet and a half in length, being meaſured to the placenta: it is variouſly rolled or twiſted about, that its length might not prove troubleſome: from the navel it goes over the breaſt, from whence it is obliquely carried over the right and left ſides of the throat and neck, turning itſelf back at the hinder part of the head, and ſo over the middle of the forehead to the placenta: ſometimes alſo it encompaſſes the neck like a chain, all which you are to underſtand of the whole cord or navel-ſtring, with the reſt of the veſſels contained therein. Its uſe is to convey the maternal blood from the placenta, through the navel, to the child, for its nouriſhment. In this navel-ſtring there are knots tranſparent in the veins, but not in the arteries, which are nothing but a more thick and fleſhy conſtitution of the membrana carnoſa in thoſe parts from

## The Kidnies, &c.

*Fig. I.*
*The Male.*

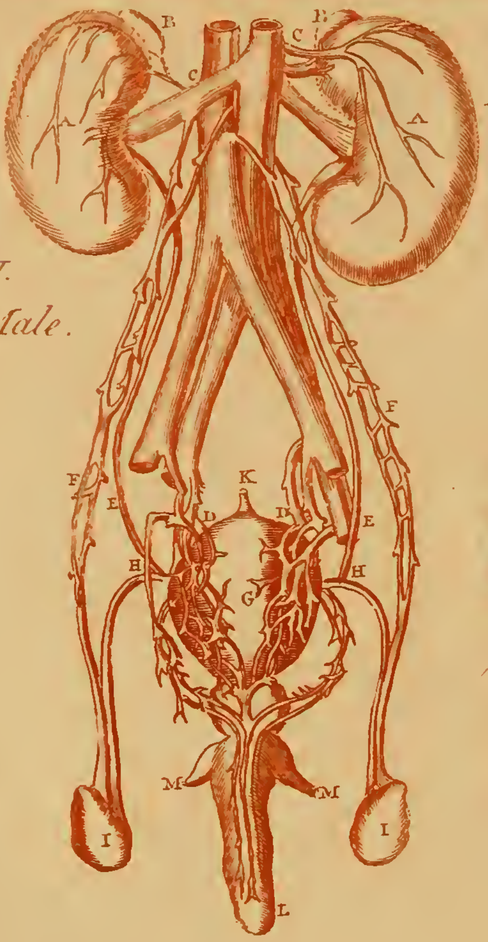
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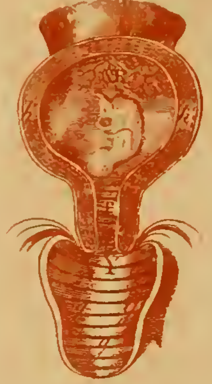
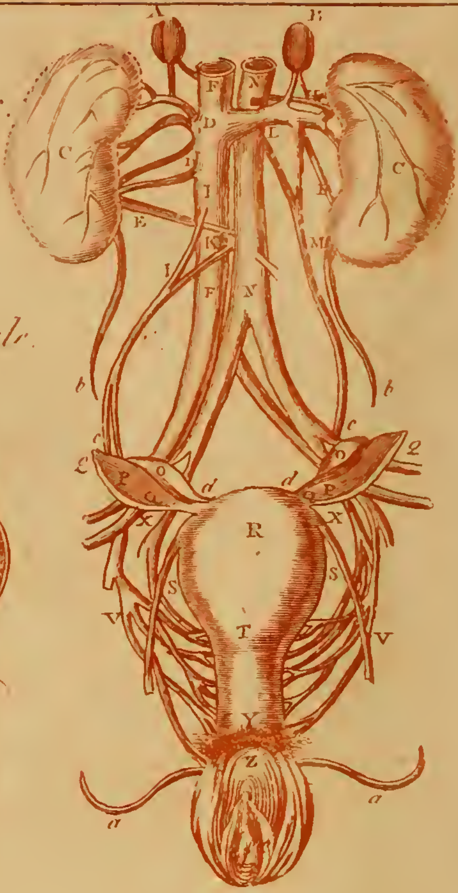
*Fig. II.*
*The Female.*

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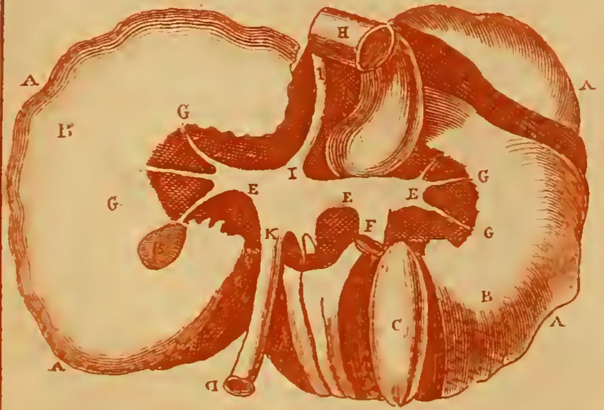
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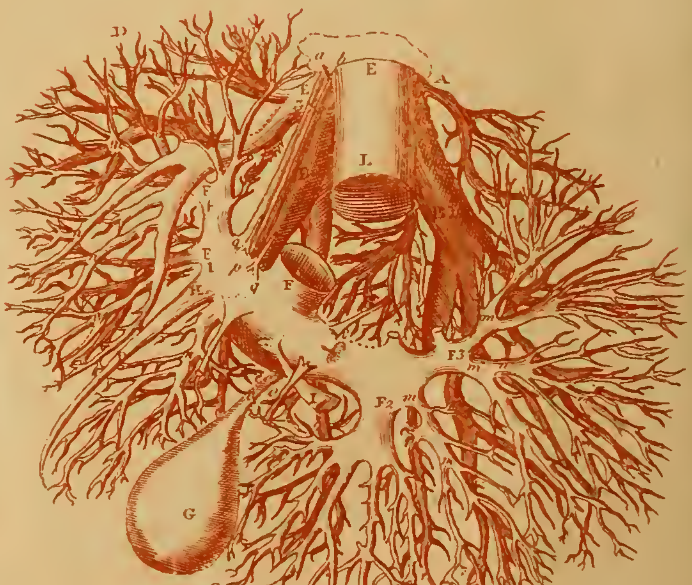
*Liver of a new-born child.*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*Blood Vessels of the Liver.*

from the number of theſe knots midwives pretend to foretel how many children a woman ſhall have; but theſe are vain divinations, for there are often more knots in the navel of the laſt child than of the firſt. It is about five feet and a half or ſix feet long, and about the thickneſs of a man's finger: when it is dry it becomes ſmaller, and is kept as a precious thing to haſten the birth in other perſons. The child being born, this navel ſtring muſt be tied with a ſtrong thread wound often about, the diſtance of two or three inches from the belly of the infant, and about three inches from the binding it muſt be cut off: afterwards the navel is to be carefully looked to till it is dry, and falls off of its own accord. Theſe veſſels, after the child is born, do, within the abdomen, degenerate into ligaments: the vein to a ligament of the liver, and the arteries into lateral ligaments of the bladder, becauſe their uſe is now aboliſhed, there being no longer any paſſage of the mother's blood. The *urachus* is a little cord or ligament, by which the bladder is ſuſtained and faſtened to the peritonæum, that, being diſtended with urine, its neck might not be compreſſed, which thing alſo is done by the arteries. Hence it appears, that the urine of a child in the womb is certainly voided by its yard into the membrane amnios, (whence it is that it is ſo full of water,) a great part of it yet remaining in the bladder, which is the cauſe that always new-born children are for the firſt days continually making water. If the urine were not in part thus voided, the bladder would not only be over-ſtretched, but broken.

To illuſtrate what has been ſaid, the annexed place exhibits the kidneys, bladder, and organs of generation, of the human ſpecies, both male and female. Fig. 1. repreſents the male, A A. are the kidneys; B B. the glandulæ ſuccenturiatæ; C C. the emulgent veſſels, together with thoſe diſtributed over the membranes of the kidneys; D D. the hypogaſtric veſſels, which, branching off from the iliacs, are diſtributed in the urinary bladder and penis; E E. the courſe of the uterers; F F. the courſe of the ſpermatic veſſels, in which ſeveral appear cut off, being thoſe diſtributed in the peritonæum; G. the urinary bladder; H H. the vaſa deferentia; I I. the teſticles; K. the urachus cut off; L. the penis erected or diſtended; M M. the erector muſcles.

Fig. 2. repreſents the female; in which A. B. denotes the capſulæ atribiliariæ; C C. the kidneys; D D. right emulgent veins; E E. right emulgent arteries; F F. vena cava, divided into the iliac branches; G. left emulgent vein; H. left emulgent arteries; I I. right ſpermatic vein; K. right ſpermatic artery; L. left ſpermatic artery; M. left ſpermatic vein; N N. aorta, divided into its iliac branches; O O women's teſticles; P P. a part of the broad ligament, or bat's wings; Q Q. the trumpets of the womb on both ſides; R R. bottom of the womb, ſhewing the placenta formed, and the embryo perfected; S S round ligaments of the womb cut off at the ſhare; T T. neck of the womb; V V. venæ hypogaſtricæ; Y Y. the paſſage of the womb; Z. the clitoris and præputium; a a. a portion of the ureters cut off; b b. a portion of the ureters deſcending cut off; c c. vaſa præparentia dilated; d d. vaſa deferentia; e e. the nymphæ; f. the meatus urinarius; g g g. the vagina laid open, with its plicæ; h h. the uterus, as ſtretched in the third month of pregnancy, with the placenta adhering to the fundus.

## OF THE THORAX.

THE thorax, cheſt, or breaſt, is that which is called the middle ventricle, being circumſcribed above by the claviculæ; beneath by the diaphragma; on the fore ſide by the ſternum; on the hinder part by the back bones; and on each ſide by the coſtæ or ribs. Its ſituation is between the upper ventricle or head, and the abdomen, being the ſeat of the vital ſpirits, and conſiſting of the parts appointed for cheriſhing the natural heat. Its figure is almoſt oval, ſomewhat flat before and behind, whereas in beaſts it is ſomewhat ſharp, ſo that mankind only lies on the back. Its ſubſtance is partly boney, partly fleſhy; boney, becauſe it contains not any parts much to be diſtended; fleſhy, becauſe it contains parts which ought to be moved, as the heart and lungs.

The breaſts, or dugs, are common to both ſexes; in men they are framed of the cutis, the membrana carnoſa, fat, and the nipple, and are called *mammillæ*. The dugs in women have beſides many remarkable veſſels, glandules, and pipes, to make and contain milk. The nipple or teat, called *papilla*, is ſpungy, like the glans of a man's yard, and perforated through the middle with many ſmall holes for the milk to paſs through. It is rougher than the other parts, that the infant may the more firmly hold it, and of an exquiſite ſenſe, that the nurſe ſhould find pleaſure when ſhe gives ſuck: round about it there is a circle, called *arcola*; in virgins it is pale and knotty; in nurſes, brown; and in old women, black. The veins are two-fold, viz. external and internal: the external ariſe from the axillary, and are placed under the ſkin which moves the dugs, and are called *thoracicæ ſuperiores*, the upper breaſt-veins: theſe, in women with child and ſuch as give ſuck, are often ſeen very blue. The internal ariſe or deſcend from the trunk of the axillary vein, or ramus ſubclavius; and are called *mammariæ venæ*, or dug-veins: theſe are met by other aſcendant veins from the womb, and therefore, the child being born, the blood is carried no longer to the womb, but to the breaſts; and hence it is that women which give ſuck ſeldom have their courſes. How milk is generated and made, the opinions of men are various: ſome think it to be made of the venal blood, but they are abſolutely deceived: ſome think it to be made only of arterial blood, and theſe err alſo from the truth: others ſay, it is made of blood and chyle: but our opinion is, that it proceeds from, and is generated of, the chylous juice, and a ſerous part of the arterial blood: for that the ſeroſity of the arterial blood (and not the ſubſtance of the blood itſelf) does help to generate and conſtitute the milk, we are induced to believe, not only from the foregoing reaſon, but becauſe no anaſtomoſes of the arteries with the lacteal pipes of the dugs could ever yet be found out: and truly this opinion Bartholine ſeems to favour, where he ſaith, that all the blood which is poured out of the arteries into the breaſts, is not turned into milk, but only the more ſerous or wheyiſh part thereof; the reſt (that which ſerves for nouriſhment excepted) running back again, by the veins, into the heart.

The membrane, called *pleura,* or inner covering of the ribs, is a membrane white, thin, hard, and reſembling the peritonæum, but thicker and ſtronger. It ariſes from the tunicles which cover the intercoſtal nerves proceeding from the back-bone, by means of which it is continued with the coats of the brain: and therefore it is thicker in the back, to whoſe vertebræ it cleaves as it were inſeparably. It is every where double, that the veſſels may be carried within the foldings thereof: the inner part, looking towards the lungs and inwards, is thickeſt, ſmootheſt, and as it were bedewed with a wateriſh humour, that it ſhould not hurt the lungs by any roughneſs; the outer part is thinner and rougher, that it might cleave the more firmly to the ribs: between theſe the matter of the pleuriſy is many times collected, and not only between the pleura and muſcles. As to its figure, it is arched without, hollow within; above it is narrower, below broader, principally towards the ſides. From it ariſe ſome nervous fibres, by which the lungs are tied to it; if theſe be too ſtraight, the motion of the lungs is hindered, which cauſes an incurable difficulty of breathing. Its uſes are to cover the whole cavity of the thorax, and render it ſmooth, that the lungs might not be hurt; and to wrap in all the vital parts, and to defend them from all external injuries. The *medaſtinum* is a membrane ſtanding in the middle of the breaſt, dividing the right ſide from the left. It ariſes from the *pleura,* being a double membrane. Its ſubſtance is membranous, yet ſofter than the *pleura*; its exterior part is rougher, becauſe of the fibres, by which it is knit to the *pleura*; but its inner ſide, towards the lungs, is ſmooth; and about the veſſels it is commonly full of fat like the caul. The uſes of the medaſtinum are, firſt, to divide the thorax into two parts, that, the breaſt and lungs being hurt or wounded on one ſide, the other might be ſafe: ſecondly, to hold up the pericardium firmly, wherein the heart is contained, that it ſhould not reſt upon the back-bone, when we lie upon our back; or, that it ſhould fall upon the breaſt-bone, when we bend ourſelves towards the ground; nor touch the ribs when we lie upon our ſides: thirdly, to give a ſafe paſſage to the veſſels which run through it, as alſo to ſuſtain the midriff, leſt it ſhould, by the weight of the bowels, be drawn too much downwards.

The *pericardium*, or *cyſtis* of the heart, is a membrane encompaſſing the whole heart, whoſe pyramidal figure it hath. It is ſo far diſtant from the heart as is ſufficient to give way for the motion of the ſame, and to contain the wateriſh humour. It has two membranes, one exterior from the mediaſtinum, tied before and behind to the *pleura*, and is fibrous; and one interior, from the external tunicles of the veſſels of the heart; for within the pericardium, the veſſels want their common tunicle, it having been ſpent upon the pericardium. The original therefore of the pericardium is at the baſis from the tunicles which compaſs the veſſels of the heart, which proceed from the pleura. It is connected circularly to the mediaſtinum, and the neighbouring parts, with many fibres; but eſpecially to the nervous circle of the diaphragma, to which it cleaves ſo exceeding faſt, that it cannot be ſeparated from it without rending: whereby the motion of the heart is directed. Within this pericardium (beſides the heart) is contained a ſerous or watery humour, tranſparently clear, and in ſome like water wherein fleſh has been waſhed: in taſte it is neither ſharp, ſalt, nor acid. It proceeds out of the veſſels of the heart, being a watery part of the blood, as lympha, and other juices, which go to their proper receptacles. The uſe of the juice is to cool and moiſten the heart, and to make it ſlippery, thereby to facilitate its motion: alſo, that the heart, by ſwimming therein, may be leſs ponderous, and not ſtrike againſt any part. Thoſe who have this humour conſumed have their hearts dry; if it be in too great a quantity, it cauſes a palpitation of the heart, and ſuffocation, and death follows therefrom; if it be quite conſumed, a conſumption of the body happens.

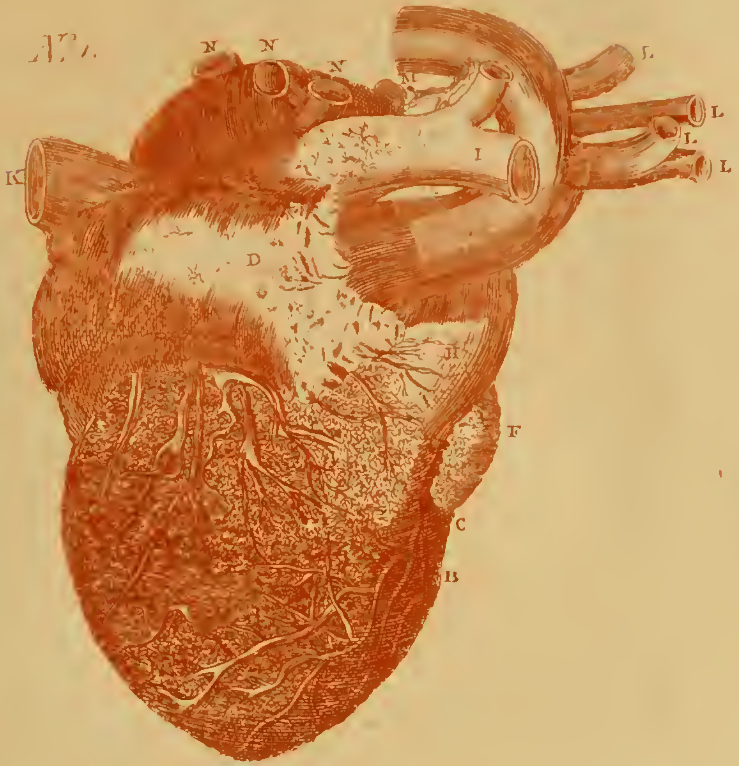
The heart is a muſcular body, included in the pericardium, and ſituated nearly in the middle of the breaſt, between the lobes of the lungs; being the primary organ of the circulation of the blood, and conſequently of life. Its figure is nearly conic, the larger end being called its baſe, and the ſmaller end its apex. Its lower part is plane, and the upper part convex. It is ſituation is nearly tranſverſe or horizontal; ſo that its baſe is in the right, and its apex, with the greateſt part of its bulk, is in the left ſide of the thorax: and conſequently it is there that the pulſation is felt. The plane ſurface of the heart lies on the diaphragm; the convex one is turned upwards. The heart is connected, 1ſt, by the intervention of the pericardium with the mediaſtinum, and with a large part of the middle of the diaphragm; this is contrived by nature, to prevent its being diſplaced, inverted, or turned too rudely about, in conſequence of the various motions of the body. 2. Its baſe is connected to its common veſſels: but its apex is free, and is received in a kind of cavity in the left lobe of the lungs. The length of the human heart is about ſix fingers breadth; its breadth at the baſe is about five fingers; and its circumference about thirteen.

It is, both externally and internally, ſurrounded with a ſmooth membrane. There is a quantity of fat about it, which covers its baſe and its apex, and ſerves for lubricating it, and for facilitating its motion. Its blood-veſſels are of two kinds, common and proper; its common or peculiar veſſels being the coronary arteries and veins. The common veſſels of the heart are two veins, called the *vena cava*, and the *vena pulmonalis*; and two arteries, the pulmonary one and aorta. The nerves of the heart are ſmall, and ariſe from the par vagum and intercoſtals: the auricles are two. There are alſo two cavities in the heart, called its ventricles: of theſe the right is thinner and weaker in its circumference, but uſually much more capacious, than the left: it receives the blood from the vena cava and the right auricle, and delivers it into the pulmonary artery, to be carried to the lungs. The left ventricle is much ſtronger and thicker in its ſides; but it is narrower and ſmaller than the right: it receives the blood from the pulmonary vein, and the left auricle, and extrudes it very forcibly into the aorta. The right ventricle is in the anterior part of the thorax; ſo that they might be called the anterior and poſterior ventricles, much more properly than the right and left. There are in the ſides of both the ventricles of the heart, and of both its auricles, ſeveral *columnæ carneæ*, or *lacertuli*, with furrows between them, ſeeming ſo many ſmall and diſtinct muſcles; and, from the concourſe of the tendinous fibres of theſe in the heart, there are formed peculiar membranes ſituated at the orifices of the auricles of the heart: and there are alſo other columns of this kind, which run tranſverſely from one ſide of the ventricles to the other: theſe ſerve partly to aſſiſt the contraction of the heart in its ſyſtole, and partly to prevent its too great dilatation in its diaſtole. The *valvulæ* of the heart are of three kinds. 1. The *tricuſpidales*; theſe are three in number, and are ſituated at the ingreſs of the vena cava in the right ventricle. 2. The *mitrales*; theſe are two, and are ſituated in the left ventricle at the ingreſs of the pulmonary vein: theſe ſerve to hinder the ingreſs of the blood from the heart into the veins again, while they are conſtricted. 3. The *ſemilunar* ones; theſe are three, and are ſituated at the organ of the aorta and pulmonary artery, and ſerve to prevent the reflux of the blood from them into the heart: theſe, for the ſake of ſtrength, are furniſhed with a number of fleſhy fibres and ſpheroidal corpuſcles. The orifices of the veins of Thebeſius and Verheyen, in the hollows of the heart, are for carrying back the blood from the ſubſtance of the heart to its cavities. The fibres of the heart are of a muſcular ſubſtance, and of a moſt amazing fabric. They are of two kinds, 1. ſtraight ones in the left ventricle; and, 2. ſpiral ones, common to both ventricles, and of two orders. The exterior ones run to the left, from the baſe of the heart: the interior ones run to the right, and interſect the others; and, when they act, they cloſely conſtringe the cavities of the heart, and drive out the blood from them.

According to the fabric, the heart may be reſolved into two muſcles, each of which conſtitutes one of its ventricles. The uſe of the heart is for the circulation of the blood: it receives the blood from the veins, running from all parts of the body; and propels it again, by its own motion, to all thoſe parts, through the arteries. On this depend life itſelf, the preſervation of the frame, and the motions and actions of all its parts. But, that the reader may have as diſtinct an idea as poſſible of this primary organ of life, we ſhall lay before him ſeveral views of it in the plate annexed; where No. 1. repreſents the human heart ſeen in its convex part, and in its natural ſituation; B marks the branches of the coronary vein; C, the coronary artery; D, the right auricle; E, branches of veins going from the right auricle; G, the trunk of the aorta; H, the trunk of the pulmonary artery; I, the aſcending trunk of the vena cava, L, L, &c. branches of the aorta, riſing upwards; M, one of the branches of the pulmonary artery; N, N, &c. branches of the pulmonary vein. No. 2. repreſents the heart opened, to ſhew the ſtructure and form of its ventricles; where A expreſſes the muſcular ſeptum, or partition, which divides the ventricles; B, the right ventricle opening into the right auricle, and into the trunk of the pulmonary artery; C, the left ventricle, opening into the left auricle, and into the great trunk of the aorta. No. 3. and No. 4. repreſent the heart in different poſitions; where A marks the aſcending trunk of the vena cava; B, the trunk of the aorta; C, branches of the pulmonary vein; D, the deſcending trunk of the vena cava; and E, part of the right auricle, cut away, to ſhew the different arrangement of the internal fibres and venous ducts.

The lungs, or lights, are the inſtruments of breathing, and are the largeſt viſcus of the thorax: they are ſituated in the two ſides of it, with the heart, as it were, between them: and are connected, by means of the mediaſtinum, with the ſternum and vertebræ; with the heart, by means of the pulmonary veſſels, and immediately with the aſpera arteria. The colour of the lungs, in infants, is a fine florid red; in adults, it is darker; and in old people, livid, or variegated with black and white. When inflated, they have ſome reſemblance to the hoof of an ox; and are convex on the upper ſide, and concave underneath. They are divided into two large lobes, the right and left; the left, which is the ſmaller, is divided again into two; and the right, which is larger, into three ſmall ones. The membrane with which the lungs are ſurrounded is continuous with the pleura. The ſubſtance of the lungs is ſpongious, or veſiculous, and they ſeem, indeed, entirely compoſed of a number of ſmall veſicles of a fleſhy texture, and of a variety of veſſels. The veſſels of the lungs are the *bronchia*, the *bronchial* artery and vein, the nerves, and the lymphatics. The uſes of the lungs are, 1. To perform the office of reſpiration, by which the blood is attenuated in the plexus of the arteries called the *rete vaſculoſum*. 2. To be

Nº 1.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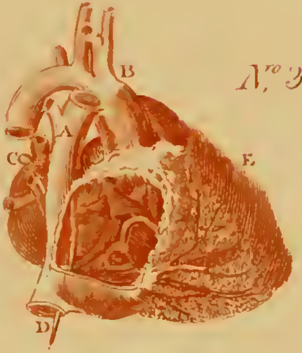

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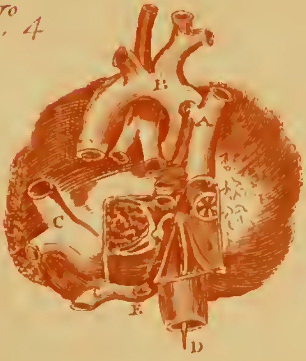

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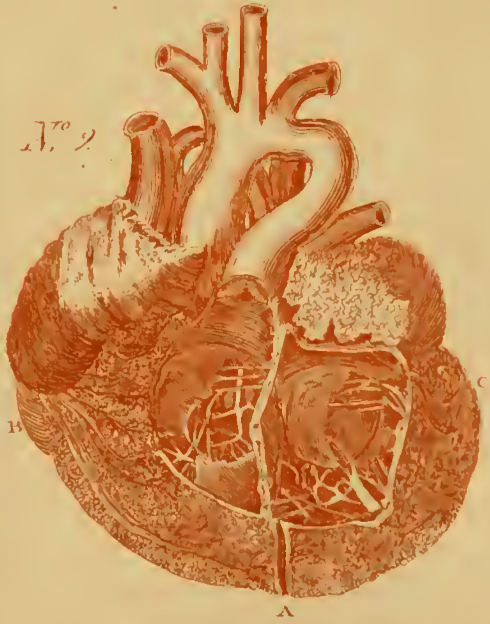


The Human Heart.

aſſiſtant to the voice in ſpeaking, and to the ſenſe of ſmelling. They are alſo emunctories of the blood, and are of many other important ſervices. The principal diſeaſes to which the lungs are ſubject, are the aſthma, conſumption, peripneumony, &c.

## OF THE GENERATION AND CIRCULATION OF THE BLOOD.

THE origin of the blood is in the chyle, which, paſſing the lacteals, is delivered into the ſubclavian; where, mixing with the blood, they proceed together to the right ventricle of the heart; and there, being yet more intimately mixed, they circulate together through the whole body: till, after ſeveral circulations, and ſecretions at the ſeveral ſtrainers of the body, they are aſſimilated, ſo as to make one uniform compound maſs, which appears to be nothing elſe but chyle altered by the artifice of nature, and exalted into blood; there being no appearance of any thing extraneous mixed with the liquor circulating in the blood-veſſels, but chyle; excepting what had been before ſeparated from it for ſome particular purpoſes, which being once ſerved, it is returned to it again: unleſs, perhaps, it may receive ſome portion of air in the lungs.

The blood, while in its veſſels, appears to the naked eye uniform and homogeneous; but, when let out and cold, it ſeparates ſpontaneouſly into two different parts, the one red and fibrous, which coheres into a maſs, and is called the *cruor*; the other thin and tranſparent, which retains fluidity when cold, and, being ſuppoſed ſpecifically heavier than the other, ſuſtains and bears it up, and is called the *ſerum*. If the red part of the blood bears too great a proportion to the ſerum, which is the caſe of athletic perſons, and others who do not take a ſufficient quantity of drink with their meat, the fault may be corrected by leſſening the meat, or by increaſing their drink. In the beginning of fevers, the proportion of the red part of the blood to the ſerum is greater, and at the end of them leſs, than it is in health. The change of this proportion is owing to perſons under this diſorder living wholly on drink and liquid nouriſhment; and bodies loaded with ſerous moiſture, being an argument of too ſmall a proportion of the red part of the blood to the ſerum, have been freed from their load by abſtaining wholly from drink. There are other cauſes beſides the bare quantities of meat and drink, which vary the proportion of the red part of the blood to the ſerum; for this proportion is greater in country-people than in citizens, in perſons who uſe exerciſe than in perſons who are inactive, and in perſons who live upon fleſh meats and fermented liquors than in perſons who live upon vegetables and water. In ſhort, this proportion is increaſed by things which dry the body and ſtrengthen the fibres; and leſſened by things of a contrary nature. Too great a proportion of the red part of the blood to the ſerum renders bodies ſubject to inflammatory.

matory fevers on taking cold. The blood is found to conſiſt chiefly of phlegm, as the baſis or vehicle; for from the beſt experiments it appears, that in ſeven ounces of human blood there are five ounces two drachms of phlegm, three drachms of a ſubtile ſpirituous oil, a ſmall quantity of a thicker oil, two drachms of ſalt, and about two of earth. From theſe conſtituent parts of the blood, variouſly combined and diſtributed by the circulatory motion impreſſed by the heart, and by the oſcillatory expanſive motion of the interſperſed air, and the re-action of the contractile veſſels, flow all the properties and operations of the blood. From this mixture of elements, and their lax compoſition, it becomes ſuſceptible of various alterations and impreſſions; the principal whereof are, coagulation, which uſually attends it out of the body, ſometimes in it, and ſcarcely ever without an artificial procurement, but always mortal; and diſſolution, which is juſt oppoſite to the former, and conſiſts in ſuch a communition of the fibrous parts of the blood as indiſpoſes it for the ſeparation of the cruor from the ſerum. This is frequently the conſequence of malignant and peſtilential fevers, &c. and is likewiſe occaſioned by ſome kinds of poiſons.

The circulation of the vital blood is performed through the arteries: and its courſe is from the heart towards the extremes of the body: and this from every part of the body, internal and external; ſtill out of a wider part into a narrower, out of the trunk into the branches. And it is on this principle alone, that all the blood may be derived into an artery, and evacuated at it. For it is evident, that all the arteries of the body are continually bringing the blood from the left part of the heart, through the trunks of the arteries, into the branches; and on the contrary that all the veins, excepting the porta, are perpetually bringing back the blood from the extreme parts into the heart. The blood being arrived here, its motion or circulation is continued as follows. The auricles of the heart, being large hollow muſcles, are furniſhed with a double ſeries of ſtrong fibres proceeding with a contrary direction to two oppoſite tendons, the one adhering to the right ventricle, the other to the ſinus venoſus: as alſo with innumerable veins and arteries; by the contractile force of theſe auricles, the blood is vigorouſly expreſſed, and driven into the right ventricle; which, upon this contraction, is rendered flaccid, empty, and diſpoſed to admit it. If now the right ventricle, thus full of blood, by the contraction of its fibres preſſes the blood towards the aperture again, venous blood, at the ſame time pouring in, will drive it back again into the cavity and mix it more intimately; till riſing up againſt the parietes, it raiſes the valvulæ tricuſpides, which are ſo connected to the fleſhy columns extended on the oppoſite ſide, as that when laid quite down they cannot cloſe the parietes of the right ventricle: theſe it thruſts towards the right auricle, till being there joined they ſtop the paſſage very cloſely, and prevent any return. By the ſame means the ſame blood riſes up into the three ſemilunar valves, placed in the extremity of the other mouth, and lying open to the pulmonary artery: theſe it ſhuts cloſe againſt the ſides of the artery, and leaves a paſſage into the artery alone. The venous blood, therefore, that is, the blood of the whole body, continually moves out of the *ſinus*, or trunk of the *vena cava*, through the right auricle and right ventricle, into the pulmonary artery, in a continued and forcible ſtream. The blood carried by this artery into the lungs, and diſtributed by its branches through the whole ſubſtance thereof, is firſt admitted into the extremities of the pulmonary vein, called *arteria venoſa*; whence, paſſing into four large veſſels, which unite together, it is brought to the left *ſinus venoſus*, or trunk of the pulmonary vein; by the force of whoſe muſculous ſtructure it is driven into the left ventricle, which on this occaſion is relaxed, and by that means prepared to receive it. Hence, as before, it is driven into the left ventricle, which is relaxed by the ſame means; and the *valvulæ mitrales*, opening, admit it into the left ventricle, and hinder its reflux into the pulmonary vein. From hence it is forced into the *aorta*; at whoſe orifice there are three ſemilunar valves, which alſo prevent a reflux by cloſing the ſame. And thus is circulation effected; all the blood ſent into the lungs, and received in the *arteria venoſa*, *ſinus venoſus*, left auricle and ventricle, being here continually propelled into the *aorta*, whoſe ramifications are ſpread throughout all the reſt of the body, with a violent motion. Thus is all the blood, in its return from every part of the body, internal and external, and from every part of the heart and its auricles, impelled into the right ventricle; out of that into the lungs; thence into the left ventricle, and thence through the whole extent of the body; and thence again brought back to the heart.

In a *fœtus*, the apparatus for the circulation is ſomewhat different from that above deſcribed. The *ſeptum*, which ſeparates the two auricles of the heart, is pierced through with an aperture, called the *foramen ovale*; and the trunk of the pulmonary artery, a little after it has left the heart, ſends out a tube in the deſcending aorta, called the communicating canal. The blood in the lungs of the *fœtus* has none of the advantages of air or reſpiration; which yet being neceſſary, nature, it is ſuppoſed, takes care that it receives a portion of air, mixed together with its mother's blood, and tranſmitted to it by the umbilical veſſels, to be diffuſed through the body. This is confirmed hence; that, by conſtringing the navel-ſtring very tight, the child dies like a man ſtrangled; which appears to be owing to nothing but the want of air. Add to this, that, as ſoon as the mother ceaſes to reſpire, the *fœtus* expires.

As to the velocity of the circulating blood, and the time wherein the circulation is completed, ſeveral computations have been made. By Dr. Keill's account, the blood is driven out of the heart into the *aorta*, with a velocity which would carry it fifty-two feet in a minute; but this velocity is continually abated in the progreſs of the blood through the numerous ſections, or branches, of the arteries; ſo that, before it arrives at the extremities of the body, its motion is infinitely diminiſhed. The ſpace of time wherein the whole maſs of blood may ordinarily circulate, is variouſly determined. Some of the lateſt writers ſtate it thus: ſuppoſing the heart to make 200 pulſes in an hour, and that at every pulſe there is expelled an ounce of blood; as the whole maſs is not ordinarily computed to exceed 24 pounds, it muſt be circulated ſeven or eight times over in the ſpace of an hour. The *impetus*, occaſioning the circulation, is great enough in ſome animals to raiſe the blood, ſix, ſeven, or eight, feet high from the orifice it ſpins out at; which, however, is far exceeded by that of the ſap of a vine in bleeding-time, which will ſometimes riſe upwards of forty feet high. The heat and motion of the blood are always greater, from a greater activity in the ſoul, in the day than in the night; and they are likewiſe ever greater from the food taken in the day-time: for the pulſe is always quicker after eating than before it; after a full meal than after a ſpare one; and after a meal of drier and ſtronger food, than after a meal of food that is moiſter and weaker.

## OF THE PULSES.

THE *pulſe* is that reciprocal motion of the heart and arteries, whereby the warm blood, thrown out of the left ventricle of the heart, is ſo impelled into the arteries, and ſo diſtributed throughout the whole body, as to be perceived by the finger. It is certain, that life, health, and the due order of the whole body, depend upon a proper and equable circulation of the blood, and humours through the ſolid parts; ſo that, the better regulated and the more equable the circulation is, the more perfectly nature preſerves herſelf, and cures the diſeaſes incident to her; and, on the contrary, the more this circulation recedes from a due and equable ſtate, the weaker nature is found to be, and the more ſubject to misfortunes and diſeaſes. Now every one muſt own, that the circulation of the blood cannot be better inveſtigated than by feeling the pulſe, not in a ſuperficial manner, but for a ſufficient time: for the pulſe not only diſcovers the imperfections and ſtrength of the whole body, but alſo the nature of the blood, and ſtate of the various ſecretions. And, as a pendulum of a clock, by its equable and regular vibrations, manifeſts the worth of the clock, ſo the pulſe diſcovers the habit of the patient, and the vigour or deprivation of all the functions.

A moderate, conſtant, and equal, pulſe, is the rule and meaſure by which we are to judge of the reſt. A moderate pulſe, is that which is large, but neither quick nor ſlow, hard nor unequal: this is the pulſe with which all others ought to be compared, and which denotes the beſt ſtate of health, the abſence of all preternatural and foreign things, and a due and temperate degree of heat: for, when ſuch a pulſe is preſent, the fluids are duly ſpirituous, the fibres poſſeſſed of their natural tone, the blood temperate and fluid, and conſequently the tranſpiration free, the nutrition good, the animal functions vigorous, the ſecretions duly carried on, and the patient in a ſtate of good health. But, when the pulſe is quicker, and conſequently more frequent than uſual, it indicates a preternatural irritation of the heart, as the ancients expreſs it, unleſs it proceeds from external cauſes. But, if ſuch a pulſe continues long, it infallibly denotes a diſorder accompanied with an increaſe, and even a fever. It is generally produced by an inteſtine motion of the blood, and a change induced on the craſis of the ſpirits, by an admixture of heterogeneous and often cauſtic particles. When the pulſe is vehement, and at the ſame time quick, it indicates a feveriſh intemperature, an admixture of ſomething heterogeneous with the blood, lymph, and ſpirits; but at the ſame time a large quantity of health and ſpirits. If a vehement and quick pulſe is alſo large, the circulation of the blood is briſk, the heat and thirſt great, and the whole habit red and turgid. Where the pulſe is ſmall, and little blood is conveyed from the heart to the arteries, and from the veins to the heart, the circulation of the blood is faint and languid. Hence the tranſpiration and ſecretions are but ſmall, and the ſtrength little: but, if a ſmall pulſe is at the ſame time weak, frequent, and quick, it denotes a great languor of the ſtrength, a preternatural inteſtine motion, and a weak circulation of the blood; and, if this ſpecies of pulſe continues long, it indicates malignity and great danger.

A ſlow pulſe generally denotes a viſcidity, thickneſs, and weak circulation, of the blood, together with a languor of the ſecretions; but, if it is at the ſame time weak, it is dangerous, and raiſes a ſuſpicion of a total loſs of ſtrength. But a pulſe which is ſlow and large denotes ſufficient remains of ſtrength, tenſion, and thickneſs of the fibres of the heart and arteries; and a viſcid and tenacious blood. All unequal pulſes are very bad, ſince they denote that there is neither a due influx of the ſpirits, nor a proper and equal mixture of the blood; but particularly ſuch pulſes always prognoſticate unlucky events, when they are weak. Intermittent pulſes are alſo of a bad kind, or generally accounted the preſages of death. But it is not univerſally ſo; for an intermittent pulſe frequently happens without danger, where, for inſtance, the ſymptoms are of a bad kind, and the patient's ſtrength ſtill entire. Hence this ſpecies of pulſe frequently happens in hypochondriac and melancholic patients, where the inteſtine motion of the blood is diminiſhed by its thickneſs. But, when the pulſe is weak and quick at the ſame time, it generally prognoſticates death. An hard pulſe generally indicates pains, ſpaſms, and convulſions, becauſe the fibres of the heart and arteries are ſpaſmodically conſtricted. The irregular, caprizating, and diſcontinued, pulſes, denote a very bad ſtate of the body, both with reſpect to the fluid and ſolid parts.

It is carefully to be obſerved, that one kind of pulſe is not found in all perſons; for the pulſe depends on the tone of the muſcular fibres, on the influx of the ſpirits, and the nature and temperament of the blood; and, as all theſe are ſurpriſingly various in human bodies, with reſpect to age, ſex, the ſeaſon of the year, the climate, the method of life, the ſleep, and the paſſions of the mind, ſo alſo the pulſes vary from each other according as theſe circumſtances differ. Thus men generally have a large and vehement pulſe, and women one of a more ſlow and weak kind; for the former have ſtronger fibres and a hotter blood than the latter. For this reaſon alſo, the circulation of the blood is briſker in men than in women; and the former do not generate ſuch loads of redundant blood and humours as women, who are generally weaker, and more ſubject to diſeaſes. Choleric perſons, and thoſe of ſanguineo-choleric conſtitutions, have a larger, quicker, and more vehement, pulſe, than phlegmatic and melancholic perſons; for which reaſon the fluids move more quickly, the excretions are made more expeditiouſly, and the blood is more fluid, in the former than in the latter; for the blood of the former is impregnated with a larger quantity of oleous and ſulphureous parts, which are the ſource and matrix of heat and ſpirituous quantity. Thus alſo, thoſe of a ſlender habit, who have ſtrong fibres, and large veſſels, have a larger and ſtronger pulſe than thoſe who are fat, have lax fibres, and narrow veſſels. Hence they are alſo ſounder, more robuſt, and more capable of enduring fatigue. This is alſo the reaſon why thoſe who are naturally thick and fat are more readily ſeized with ſickneſs, and deſtroyed by it, than thoſe of ſlender habits. In infants and children, the pulſe is frequent and ſoft; whereas, in old perſons, it is ſlow and large, whilſt in young perſons, and thoſe full grown, it is large and vehement; for generally infants and children generate a larger quantity of humours (which are neceſſary to their growth), and collect a great deal of ſordes, which is the reaſon why infants and children are more generally ſeized with ſickneſs, and more readily die of it, than youths and adults. Old perſons have thick blood, but rigid fibres; for which reaſon their pulſe is hard, and makes a forcible impreſſion on the touch; but in infants and children the pulſe is ſoft, on account of the tenderneſs and laxity of the fibres. The pulſe is alſo changed by the ſeaſon of the year, the exerciſe of the body, the aliments, and the affections of the mind. In the middle of the ſpring, the pulſe is large and vehement; at this ſeaſon alſo the ſtrength is greateſt; for which reaſon perſons are at that time moſt rarely ſick, and recover moſt eaſily: in the middle of the ſummer the pulſe is quicker and weaker, becauſe by the intenſe heat the ſtrength is impaired, while the inteſtine motion of the fluids is greater than it uſually is. In autumn the pulſe is ſlower, ſofter, and weaker, than at the middle of the ſummer, thoſe which are cold to the winter, and ſuch as are temperate to the ſpring.

Exerciſe increaſes the pulſe, and conſequently the circulation of the blood, whilſt an idle and inactive ſtate renders the pulſe ſlow, weak, and languid, and diminiſhes the circulation of the fluids. Spirituous aliments render the pulſe large, vehement, and frequent. The pulſe of ſuch as are aſleep is ſlow, ſmall, and languid; but, as ſoon as they awake, it forthwith becomes large, quicker, and ſtronger; the pulſe of thoſe who are angry is large, vehement, and quick; that of ſuch as are frightened, frequent, ſmall, and inactive; and of thoſe who are ſorrowful ſmall, languid, and ſlow; hence the common and ordinary affections of the body change the pulſe, ſo that, without duly adverting to theſe affections, the pulſe cannot be certainly underſtood, nor can it be determined how far it recedes from a natural ſtate in conſequence of diſeaſes.

The natural pulſe is therefore to be felt and to be obſerved, not immediately after exerciſe, bathing, immoderate eating, drinking wine, or other cauſes which exagitate the heart and ſpirits; for we are to determine nothing about the pulſe till the force of external cauſes has ceaſed, and all perturbations of the body are allayed; for the pulſe is the moſt certain ſign and criterion for judging of the motion of the heart and blood; but, if the pulſe alone is obſerved, without paying a due regard to other circumſtances, it may lay a foundation for forming a falſe judgment; ſince the pulſe may be diſturbed by a thouſand abſtract cauſes.

All authors, both ancient and modern, agree, that a frequent pulſe, in every ſpecies of fever, whether continual or intermittent, whether benign or malignant, whether in its beginning or at its height, proves ſuch a fever to be preſent; hence the quick or frequent pulſe is conſidered as the true eſſential ſign of fevers; but this frequency is either greater or leſs, and aſſociates itſelf with the great or vehement, or with the ſmall and weak, according to the diverſity of fevers, and the times of the diſeaſe. A frequent pulſe when weak and ſmall, is ſcarcely ever good; ſince it denotes a languid and ſlow circulation of the blood; but a frequent, large, and vehement, pulſe, ſuch as is generally obſerved in the height of continual fevers, denotes a briſk circulation of the blood, and an increaſed heat of the body. In inveſtigating the cauſe of a frequent pulſe, which is generally preternatural, and accompanies ſeveral diſorders, we ſhall follow the accurate Bellini, who accounts for the motion of the heart from the influx of the blood through the coronary arteries, and of the nervous fluid through the nerves, into the fibres of the heart; whence he concludes, that the muſcles of the heart are moſt frequently moved when the nervous fluid is moſt frequently conveyed into them, which happens when it is forced into them by a ſufficient quantity of blood flowing forcibly into the brain. Now by a frequent contraction of the heart a frequent pulſe is produced, which indicates that a proper quantity of blood is conveyed to the brain, and that the brain is forcibly preſſed, which will happen, either when the blood ſtagnates therein, in conſequence of an obſtruction of its veins, or when the blood contained in theſe veins cannot flow in other parts, or in the lungs; or when the blood is thrown into a ſtate of effervefcence, by which it aſſumes a tendency to move in every direction with a greater impetus, and by that means preſſes the brain more powerfully; the muſcles of the heart alſo move more frequently when irritated by any ſtimulus. If, therefore, the blood is too acid or hot, ſo as to ſtimulate the ſinuſes of the heart, the heart will be more frequently contracted, and the frequency of the pulſe will indicate a ſtimulating quality in the blood.

Since from the pulſe we thus form a judgment not only of the circulation and temperature of the blood, but alſo of the motion of the ſpirits, and the ſtrength of the patient, ſo the knowledge of the pulſe, and a due attention to it, become of ſingular ſervice, not only in inveſtigating the nature of diſorders, and forming a right judgment concerning them, but alſo in preſcribing medicines for their cure. But they muſt be carefully, not ſuperficially, conſulted. The phyſicians of China are far more careful in this reſpect than thoſe of Europe; for the Chineſe often ſpend a whole hour in feeling the pulſe, whilſt the Engliſh phyſicians have hardly patience to feel above two pulſations; a practice highly culpable, ſince, after ten ſtrokes of the artery, an inequality or intermiſſion often occurs, which happens when the unequally-mixed blood paſſes through the heart. The pulſe is alſo to be felt in both wriſts, in the neck, and in the temples; ſince it is certain from experience, that the pulſe in the wriſts frequently varies, and may be more commodiouſly felt in one than another. We ought alſo to advert to the pulſes of other parts; thus, ſometimes hypochondriac patients perceive a large pulſe under the ribs on the left ſide, which happens when a quick and viſcid blood, exagitated by heat, or any other cauſe, endeavours to procure a quick paſſage through the pancreas and ſpleen, but, ſtopping in their narrow veſſels, produces a pulſation, and a kind of pricking pain.

In continual and malignant fevers a large internal pulſation in the veins of the head generally denotes a ſubſequent delirium; ſince it is a ſign that the blood there congeſted circulates ſlowly, till at laſt, becoming ſtagnant, it produces a violent inflammation of the meninges. If a large pulſe ariſes from an exceſſive ebullition of the blood, ſo that in fevers the veins of the temples beat, and the face is turgid, without a ſoftneſs of the præcordia, there is reaſon to ſuſpect that the diſeaſe will be long, and that it will not terminate without a large hæmorrhage from the noſe, an hiccough, convulſions, or ſciatic pains. The reaſon of this is, that the redundant blood ſeeks for an outlet either by the noſe or the hæmorrhoidal veins; and, the ſooner this happens, the ſooner the patient is free from his diſorder.

When a pulſation is obſerved in any part of the body, where at other times it is not felt, we may certainly conclude, that the part is inflamed and diſpoſed to a ſuppuration, eſpecially when it is accompanied with tumour and pain. An hard pulſe is almoſt an infallible ſign in the membranous parts; for this hardneſs of the pulſe, or exceſſive tenſion and vibration of the artery, indicates ſomething of a ſpaſmodic nature, ariſing from the conſent of the parts, and produced by the inflammation and pain. The pulſe of perſons labouring under diſorders of the breaſt, or a palpitation of the heart, is frequent, unequal, and languid; but ſuch a pulſe, unleſs when vehement, is accompanied with no preternatural heat, and happens becauſe the blood does not paſs through the ſinuſes of the heart and the lobes of the lungs. In weakneſs, and a diſpoſition of ſyncopes, the pulſe is generally ſmall, rare, and languid; but, if the pulſe is abſolutely imperceptible, the body covered with a cold ſweat, and the functions of the mind are not totally deſtroyed, I have obſerved, that the patient infallibly dies in ſix hours: and ſuch a ſituation I have ſeen produced by corroſive poiſon. It is to be obſerved, that about the critical times in fevers, when nature endeavours to throw off the ſuperfluous and peccant matter by ſtool or ſweat, the pulſe, though languid, is yet more regular and leſs frequent, which is a certain ſign of recovery. But, if the pulſe is ſoft and undulating, it is a ſign that a ſalutary and critical ſweat is juſt coming on.

It is alſo to be obſerved, that the pulſe is changed by medicines. Thus, after draſtic purgatives, which procure too many ſtools, the pulſe is generally preternaturally quick. After venæſection, eſpecially in plethoric habits, the pulſe becomes quicker, a ſign that the circulation of the blood, in conſequence of its having a larger ſpace, is happily increaſed, ſince by this means a ſuppreſſion of the menſes or hæmorrhoids is generally removed. It is certain, not only from the authority of Sydenham, but alſo from experience, that, after the uſe of chalybeats, the pulſe is quicker, the face redder, and the heat greater. Strong ſudorifics, compoſed of volatile oleous ſubſtances, greatly increaſe the pulſation of the heart and arteries; on the contrary, anodynes, opiates, preparations of nitre, precipitating powders, acids, and ſuch things as diminiſh the inteſtine motion of the blood and fix its ſulphur, render the pulſe calm and moderate in pains, inflammations, and febrile intemperature. Some very uſeful and important rules for the exhibition of medicines are drawn from the ſtate of the pulſe: thus purging and vomiting are contra-indicated by a too quick and vehement pulſe; for, when the blood is in a violent motion and ebullition, the ſecretions are generally very languid. If the ſtrength is defective, which may be known by the languid ſtate of the pulſe, emetics and purgatives diminiſh the ſtrength ſtill more; ſo that the phyſician ought to conſult the pulſe before he exhibits them. For when the pulſe is ſtrong, and the motion of the blood regular, theſe artificial evacuations are moſt beneficial, and ſucceed beſt. The ſame caution is neceſſary in the exhibition of ſudorifics and all analeptics, which convey heat and motion to the blood; for, if the pulſe is ſtrong and frequent, ſuch ſpirituous ſubſtances do more injury than good; they rarefy the blood too much, and accelerate its inteſtine motion; by which means a delirium and other inflammations are frequently brought on. Great circumſpection and attention to the pulſe are alſo requiſite in the exhibition of narcotics or opiates; for, as theſe are poſſeſſed of a power of ſtopping the motion of the blood and ſpirits, and conſequently of impairing ſtrength, ſo they ought never to be exhibited when the pulſe is weak, languid, and ſmall, but are to be avoided like poiſon.

## OF DISEASES IN GENERAL, THEIR PREVENTION, AND CURE.

DISEASE introduced the art of Medicine, which, in a primitive ſenſe, communicates the means of preſerving health when preſent, and of reſtoring it when loſt. If we look back into the origin of the medical art, we ſhall find its firſt foundation to be owing to accidental events, and natural inſtinct. In the early ages, the ſick were placed in croſs ways, and other public places, to receive the advice of ſuch paſſengers as knew a remedy ſuitable to their complaints; and, the better to preſerve the memory of every remarkable cure, both the diſeaſe and the remedy were engraved on pillars, that patients in the like caſes might reſort to them for inſtruction and relief. Hence an inſight into the virtues of herbs and plants, of metals and minerals, was originally acquired.

As to the part which reaſon has acted in the improvement of medicine, it ſeems to have conſiſted in obſerving, 1. That diſeaſes attended with particular circumſtances, called ſymptoms, were ſometimes cured without the aſſiſtance of art, by ſpontaneous evacuations, as hæmorrhages, diarrhœas, vomitings, or ſweats; whence bleeding, purges, and vomits, took their riſe. 2. That the patients were often relieved by the breaking out of various tumours; whence aroſe the application of topical remedies. And, indeed, it is the beſt method of improving phyſic, to obſerve carefully what means nature, unaſſiſted by art, employs to free the conſtitution from diſtempers; ſince many important hints may be thence taken, for the relief of other patients under the like circumſtances. He, who would advance the healing art, ought to collect a ſelect treaſure of practical obſervations, reſt ſatisfied with a few but well-choſen medicines, be thoroughly acquainted with their virtues and efficacy in different conſtitutions and diſeaſes, deſpiſe the cumberſome load of recipes with which practical writers of an inferior rank abound, reject the ſo much extolled medicines of the chemiſts, and attempt the relief of patients by a proper diet and exerciſe, and ſuch medicines as obſervation and ſound philoſophy recommend: for to the improvement of anatomy and natural philoſophy is much of the ſucceſs of phyſic to be attributed. The knowledge of medicines, or ſuitable remedies, is alſo highly neceſſary in thoſe, who, in order to moderate the impetus in acute diſorders, make evacuations, blunt acrimony, dilute too thick fluids, condenſe thoſe that are too thin, brace up too lax parts, and relax ſuch as are too much conſtricted; they alſo drive the humours to parts where they will be leaſt prejudicial, upon occaſion mitigate pain, and in languors uſe ſtimulating medicines. Wine, vinegar, barley, nitre, honey, rhubarb, opium, and other ſimples, are found both ſafe and powerful medicines. Sydenham tells us, that all manner of diſeaſes may be cured by bleeding, purging, with a ſubſequent opiate, and proper regimen. In chronical diſeaſes mineral waters, ſalts, diaphoretics, ſoap, mercury, ſteel, with a few vegetables, and proper exerciſe, will generally effect the cure. In a word, what is there in the moſt elaborate preparation, that is worth half the pains taken about it? Mercury, opium, the Peruvian bark, and other ſimples, with fire and water, are acknowledged as the ſureſt remedies by the ableſt maſters of the art; and theſe are found to be more efficacious in that crude ſtate, in which bountiful nature has imparted them to us, than after the moſt operoſe and artificial preparations. We can deſpair of nothing, while we follow ſimplicity; but the event of intricate labour is fallacious.

Diſeaſes, in this and other countries, often flow from local circumſtances; whence they admit of great mitigation, and ſometimes of being entirely prevented, particularly if proper and timely means be taken for that purpoſe. Diſeaſed parents, unwholeſome food, confined air, and uncommonly wet, cold, damp, or hot, ſeaſons, are the forerunners of various diſorders; and, as theſe are generally foreſeen and known, it ſhould be the duty of every individual to guard againſt them.

Men are alſo expoſed to particular diſeaſes from the occupations which they follow. Chymiſts, founders, glaſs-makers, and ſeveral other artiſts, are hurt by the unwholeſome air which they are obliged to breathe. This air is not only loaded with the noxious exhalations ariſing from metals and minerals, but is ſo charged with phlogiſton as to be rendered unfit for expanding the lungs ſufficiently, and anſwering the other important purpoſes of reſpiration. Hence proceed aſthmas, coughs, and conſumptions of the lungs, ſo incident to perſons who follow theſe employments. Such artiſts ought never to continue too long at work; and when they give over they ſhould ſuffer themſelves to cool gradually. They ought never to drink large quantities of cold, weak, or watery, liquors, while the bodies are hot, nor to indulge in any thing that is cold on the ſtomach.

Miners, and all who work under ground, are likewiſe hurt by unwholeſome air. The air, by its ſtagnation in deep mines, not only loſes its proper ſpring and other qualities neceſſary for reſpiration, but is often loaded with ſuch noxious exhalations as to become a moſt deadly poiſon. Miners are not only hurt by unwholeſome air, but likewiſe by the particles of metal which adhere to their ſkin, clothes, &c. Theſe are abſorbed, or taken up into the body, and occaſion palſies, vertigoes, and other nervous affections, which often prove fatal. Fallopius obſerves, that thoſe who work in mines of mercury ſeldom live above three or four years. Lead, and ſeveral other metals, are likewiſe very pernicious to the health.

All who work in mines or metals ought to waſh carefully, and to change their clothes as ſoon as they give over working. Nothing would tend more to preſerve the health of ſuch people than a ſtrict and almoſt religious regard to cleanlineſs. Plumbers, painters, gilders, ſmelters, makers of white lead, and many others who work in metals, are liable to the ſame diſeaſes as miners, and ought to obſerve the ſame directions for avoiding them. Tallow-chandlers, boilers of oil, and all who work in putrid animal ſubſtances, are likewiſe liable to ſuffer from the unwholeſome ſmells or effluvia of theſe bodies. They ought to pay the ſame regard to cleanlineſs as miners: and when they are troubled with nauſea, ſickneſs, or indigeſtion, they ſhould take a gentle purge.

Thoſe who follow laborious employments are in general the moſt healthy of mankind; yet the nature of their occupations, and the places where they are carried on, expoſe them to ſome particular diſeaſes. Huſbandmen, for example, are expoſed to all the viciſſitudes of the weather, which, in this country, are often very great and ſudden, and occaſion colds, coughs, quinſies, rheumatiſms, fevers, and other acute diſorders. They are likewiſe forced to work hard, and often carry burdens above their ſtrength, which, by overſtraining the veſſels, occaſions aſthmas, ruptures, &c.

Such as bear heavy burdens, as porters, labourers, &c. are obliged to drraw the air with much greater force, and alſo to keep their lungs diſtended with more violence, than is neceſſary for common reſpiration: by this means the tender veſſels of the lungs are overſtretched, and often burſt, inſomuch that a ſpitting of blood or fever enſues. Hippocrates mentions an inſtance to this purpoſe, of a man, who, upon a wager, carried an aſs; but was ſoon after ſeized with a fever, a vomiting of blood, and a rupture. Carrying heavy burdens is generally the effect of mere lazineſs, which prompts people to do at once what ſhould be done at twice. Sometimes it proceeds from vanity or emulation. Hence it is, that the ſtrongeſt men are moſt commonly hurt by heavy burdens, hard labour, or feats of activity. It is rare to find one who boaſts of his ſtrength without a rupture, a ſpitting of blood, or ſome diſeaſe, which he reaps as the fruit of his folly. When the muſcles are violently ſtrained, frequent reſt is neceſſary, in order that they may recover their tone; without this, the ſtrength and conſtitution will ſoon be worn out, and a premature old age brought on.

Labourers in the hot ſeaſon are apt to lie down and ſleep in the ſun. This practice is ſo dangerous, that they often wake in a burning fever. Thoſe ardent fevers, which prove ſo fatal about the end of ſummer and beginning of autumn, are frequently occaſioned by this means. Fevers of a very bad kind are often occaſioned among labourers by poor living. When the body is not ſufficiently nouriſhed, the humours become vitiated, and the ſolids weak; from whence the moſt fatal conſequences enſue. Poor living is likewiſe productive of many of thoſe cutaneous diſeaſes ſo frequent among the lower claſs of people. It is remarkable that cattle, when pinched in their food, are generally affected with diſeaſes of the ſkin, which ſeldom fail to diſappear when they are put upon a good paſture. This ſhews how much a good ſtate of the humours depends upon a ſufficient quantity of proper nouriſhment. Poverty not only occaſions, but aggravates, many of the diſeaſes of the laborious, and makes them miſerable indeed. Here the godlike virtue of charity ought always to exert itſelf. To relieve the induſtrious poor in diſtreſs, is ſurely the moſt exalted act of religion and humanity. They alone who are witneſſes of thoſe ſcenes of calamity, can form a notion of what numbers periſh in diſeaſes, for want of proper aſſiſtance, and even for want of the neceſſaries of life.

Soldiers ſuffer many hardſhips from the inclemency of ſeaſons, long marches, bad proviſions, hunger, watching, unwholeſome climates, bad water, &c. Theſe occaſion fevers, fluxes, rheumatiſms, and other fatal diſeaſes, which generally do greater execution than the ſword, eſpecially when campaigns are continued too late in the year. A few weeks of cold rainy weather will often prove more fatal than an engagement. Sailors may alſo be numbered amongſt the laborious. They undergo great hardſhips from change of climate, the violence of the weather, hard labour, &c. One great ſource of the diſeaſes of ſea-faring people is exceſs. When they get on ſhore, after having been long at ſea, without regard to the climate, or their own conſtitutions, they plunge headlong into all manner of riot, and even perſiſt till a fever puts an end to their lives. Thus intemperance, and not the climate, is often the cauſe why ſo many of our brave ſailors die on foreign coaſts. Such people ought not to live too low; but they would find moderation the beſt defence againſt fevers, and many other maladies. We have reaſon to believe, if due attention were paid to the diet, air, clothing, and above all things to the cleanlineſs, of ſea-faring people, they would be the moſt healthy ſet of men in the world; but, when they are neglected, the very reverſe will happen.

Nothing can be more contrary to the health and nature of man than a ſedentary life, yet this claſs comprehends the far greater part of the ſpecies. Almoſt the whole female world, and in manufacturing countries the major part of the males, may be reckoned ſedentary. But, though ſedentary employments are neceſſary, yet there ſeems to be no reaſon why any perſon ſhould be confined for life to theſe alone. It is conſtant confinement that ruins the health. A man will not be hurt by ſitting five or ſix hours a-day; but, if he be obliged to ſit ten or twelve, in confined air, he will ſoon become injured in his health. Unwholeſome air is the cauſe of many diſorders. Few are aware of the danger ariſing from it. People generally pay ſome attention to what they eat and drink, but ſeldom regard what goes into the lungs, though the latter often proves more ſuddenly fatal than the former. A ſedentary life ſeldom fails to occaſion an univerſal relaxation of the ſolids. This is the great ſource from whence moſt of the diſeaſes of ſedentary people flow. The ſcrophula, conſumption, hyſterics, and nervous diſeaſes, now ſo common, were very little known in this country before ſedentary artificers became ſo numerous: and they are very little known ſtill among ſuch of our people as follow active employments without doors, though in great towns at leaſt two-thirds of the inhabitants are afflicted with them. Inſtead of multiplying rules for preſerving the health of the ſedentary, we ſhall recommend to them the following plan, viz. That every perſon who follows a ſedentary employment ſhould cultivate a piece of ground with his own hand. This he might dig, plant, ſow, and weed, at leiſure hours, ſo as to make it an exerciſe and amuſement, while it produced many of the neceſſaries of life. After working an hour in a garden, a man will return with more keenneſs to his employment within doors, than if he had been all the while idle. Labouring the ground is every way conducive to health. It not only gives exerciſe to every part of the body, but the very ſmell of the earth and freſh herbs revives and cheers the ſpirits, whilſt the perpetual proſpect of ſomething coming to maturity delights and entertains the mind. We are ſo formed as to be always pleaſed with ſomewhat in proſpect, however diſtant or however trivial. Hence the happineſs that men feel in planting, ſowing, building, &c. Theſe ſeem to have been the chief employments of the more early ages: and, when kings and conquerors cultivated the ground, there is reaſon to believe, that they knew as well wherein true happineſs conſiſted as we do. In a word, exerciſe without doors, in one ſhape or another, is abſolutely neceſſary to health. Thoſe who neglect it, though they may drag out life, can hardly be ſaid to enjoy it. Weak and effeminate, they languiſh for a few years, and ſoon drop into an untimely grave.

Every diſeaſe may be conſidered as an aſſemblage of ſymptoms, and muſt be diſtinguiſhed by thoſe that are moſt obvious and permanent; for, by a due attention to them, the inveſtigation of diſeaſes in general will be found a much leſs difficult matter than people are ready to imagine. A proper attention to the patient's age, ſex, temper of mind, conſtitution, and manner of life, will likewiſe greatly aſſiſt, both in the inveſtigation and treatment of diſeaſes. In childhood the fibres are lax and ſoft, the nerves extremely irritable, and the fluids thin; whereas in old age the fibres are rigid, the nerves become almoſt inſenſible, and many of the veſſels impervIable. Theſe and other peculiarities render the diſeaſes of the young and aged very different, and of courſe they muſt require a different method of treatment. Females are liable to many diſeaſes which do not afflict the other ſex: beſides, the nervous ſyſtem being more irritable in them than in men, their diſeaſes require to be treated with greater caution. They are leſs able to bear large evacuations; and all ſtimulating medicines ought to be adminiſtered to them with a ſparing hand. The temper of mind ought to be carefully attended to in all diſeaſes. Fear, anxiety, and a fretful temper, both occaſion and aggravate diſeaſes. In vain do we apply medicines to the body to remove maladies which proceed from the mind. When that is affected, the beſt medicine is to ſoothe the paſſions, to divert the mind from anxious thought, and to keep the patient as eaſy and cheerful as poſſible. Few things are of greater importance, in the cure of diſeaſes, than cleanlineſs. When a patient is ſuffered to lie in dirty clothes, whatever perſpires from his body is again reſorbed, or taken up into it, which ſerves to nouriſh the diſeaſe, and increaſe the danger, Many diſeaſes may be cured by cleanlineſs alone; moſt of them may be mitigated by it, and in all of them it is highly neceſſary both for the patient and thoſe who attend him.

## OF FEVERS.

FEVERS are not only the moſt frequent of all diſeaſes, but they are likewiſe the moſt complex: in the moſt ſimple ſpecies of fever there is always a combination of ſeveral different ſymptoms. The diſtinguiſhing ſymptoms of fever are, increaſed heat, frequency of pulſe, loſs of appetite, general debility, pain in the head, and a difficulty in performing ſome of the vital and animal functions. The other ſymptoms uſually attendant on fevers are, nauſea, thirſt, anxiety, delirium, wearineſs, waſting of the fleſh, want of ſleep, or the ſleep diſturbed and not refreſhing. As a fever is only an effort of Nature to free herſelf from an offending cauſe, it is the buſineſs of thoſe who have the care of the ſick, to obſerve with diligence which way Nature points, and to endeavour to aſſiſt her operations. Our bodies are ſo framed, as to have a conſtant tendency to expel or throw off whatever is injurious to health. This is generally done by urine, ſweat, ſtool, expectoration, vomit, or ſome other evacuation. There is reaſon to believe, if the efforts of nature, at the beginning of a fever, were duly attended to and promoted, it would ſeldom continue long; but, when her attempts are either neglected or counteracted, it is no wonder if the diſeaſe proves fatal. There are daily inſtances of perſons, who, after catching cold, have all the ſymptoms of a beginning fever; but, by keeping warm, drinking diluting liquors, bathing the feet in warm water, &c. the ſymptoms in a few hours diſappear, and the danger is prevented. When fevers of a putrid kind threaten, the beſt method of obviating their effects is by repeated vomits. Almoſt every perſon in a fever complains of great thirſt, and calls out for drink, eſpecially of a cooling nature. This at once points out the uſe of water and other cooling liquors. What is ſo likely to abate the heat, attenuate the humours, remove ſpaſms and obſtructions, promote perſpiration, increaſe the quantity of urine, and, in ſhort, produce every ſalutary effect in an ardent or inflammatory fever, as drinking plentifully of water, thin gruel, or any other weak liquor of which water is the baſis? The neceſſity of diluted liquors is pointed out by the dry tongue, the parched ſkin, and the burning heat, as well as by the unquenchable thirſt, of the patient. Many cooling liquors which are extremely grateful to patients in a fever, may be prepared from fruits, as decoctions of tamarinds, apple-tea, orange-whey, and the like. Mucilaginous liquors might alſo be prepared from marſhmallow-roots, linſeed, lime-tree buds, and other mild vegetables particularly pointed out in the Herbal. Theſe liquors, eſpecially when acidulated, are highly agreeable to the patient, and ſhould never be denied him. In fevers the mind as well as body ſhould be kept eaſy. Company is ſeldom agreeable to one that is ſick. Indeed every thing that diſturbs the imagination increaſes the diſeaſe; for which reaſon every perſon in a fever ought to be kept perfectly quiet, and neither allowed to ſee or hear any thing that may in the leaſt affect or diſcompoſe his mind. What food the patient takes ſhould be in ſmall quantity, light, and of eaſy digeſtion. It ought to be chiefly of the vegetable kind, as panada, roaſted apples, gruels, and ſuch like. The freſh air ſhould likewiſe be taken as much as poſſible; it not only removes his anxiety, but cools the blood, revives the ſpirits, and proves every way beneficial. Among common people, the very name of a fever generally ſuggeſts the neceſſity of bleeding. This notion ſeems to have taken its riſe from moſt fevers in this country having been formerly of an inflammatory nature; but true inflammatory fevers are now ſeldom to be met with. Sedentary occupations, and a different manner of living, have ſo changed the ſtate of diſeaſes in Britain, that there is now hardly one fever in ten where the lancet is neceſſary. In moſt low, nervous, and putrid, fevers, which are now ſo common, bleeding is really hurtful, as it weakens the patient, ſinks his ſpirits, &c. We would recommend this general rule, never to bleed at the beginning of a fever, unleſs there be evident ſigns of inflammation. Bleeding is an excellent medicine when neceſſary, but ſhould never be wantonly performed. It is likewiſe a common notion, that ſweating is always neceſſary in the beginning of a fever. When the fever proceeds from an obſtructed perſpiration, this notion is not ill-founded. If the patient only lies in bed, bathes his feet and legs in warm water, and drinks freely of water-gruel, or any other weak diluting liquor, he will ſeldom fail to perſpire freely. The warmth of the bed, and the diluting drink, will relax the univerſal ſpaſm, which generally affects the ſkin at the beginning of a fever; it will open the pores, and promote the perſpiration, by means of which the fever may often be carried off. But, inſtead of this, the common practice is to heap clothes upon the patient, and to give him things of a hot nature, as ſpirits, ſpiceries, &c. which fire his blood, increaſe the ſpaſms, and render the diſeaſe more dangerous. In all fevers a proper attention ſhould be paid to a patient's longings. Theſe are the calls of Nature, and often point out what may be of real uſe. Patients are not indeed to be indulged in every thing that the ſickly appetite may crave; but it is generally right to let them have a little of what they eagerly deſire, though it may not ſeem altogether proper. What the patient longs for, his ſtomach will generally digeſt; and ſuch things have ſometimes a very happy effect.

## OF INTERMITTENT FEVERS, OR AGUES.

THE ſeveral kinds of intermittent fevers, or agues, take their names from the period in which the fit returns, as quotidian, tertian, quartan, &c. They are generally occaſioned by effluvia from putrid ſtagnated water. This is evident from their abounding in rainy ſeaſons, and being moſt frequent in countries where the ſoil is marſhy, as in Holland, the Fens of Cambridgeſhire, the Hundreds of Eſſex, &c. This diſeaſe may alſo be occaſioned by eating too much ſtone-fruit, by a poor watery diet, damp houſes, evening dews, lying upon the damp ground, watching, fatigue, depreſſing paſſions, and the like. When the inhabitants of a high country retire to a low one, they are apt to prove fatal. In a word, whatever relaxes the ſolids, diminiſhes the perſpiration, or obſtructs the circulation in the capillary or ſmall veſſels, diſpoſes the body to agues.

CURE.---As the chief intentions of cure in an ague are to brace the ſolids, and promote perſpiration, the patient ought to take as much exerciſe between the fits as he can bear. If he be able to go abroad, riding on horſeback, or in a carriage, will be of great ſervice. But, if he cannot bear that kind of exerciſe, he ought to take ſuch as his ſtrength will permit. Nothing tends more to prolong an intermitting fever, than indulging a lazy indolent diſpoſition. In this diſeaſe, the ſtomach is generally loaded with cold viſcid phlegm, and frequently great quantities of bile are diſcharged by vomit; which plainly points out the neceſſity of ſuch evacuations. Vomits are therefore to be adminiſtered before the patient takes any other medicine. But, if the patient be afraid to take a vomit, he ought to cleanſe the bowels by a doſe or two of Glauber's ſalt, jalap, or rhubarb: after this, two ounces of the beſt Peruvian bark, finely powdered, may be divided into twenty-four doſes. Theſe may either be made into boluſſes, as they are uſed, with a little ſyrup of lemon, or mixed in a glaſs of red wine, a cup of camomile-tea, water-gruel, or any other drink that is more agreeable to the patient. In an ague which returns every day, one of the above doſes may be taken every two hours during the interval of the fits. In a tertian, or third-day ague, it will be ſufficient to take a doſe every third hour during the interval; and in a quartan, every fourth. If the patient cannot take ſo large a doſe of the bark, he may divide each of the powders into two parts, and take one every hour, &c. For a young perſon, a ſmaller quantity of this medicine will be ſufficient, and the doſe muſt be adapted to the age, conſtitution, and violence of the ſymptoms. The above quantity of bark will frequently cure an ague; the patient, however, ought not to leave off taking the medicine as ſoon as the paroxyſms are ſtopped, but ſhould continue to uſe it till there is reaſon to believe the diſeaſe is entirely overcome. Moſt of the failures in the cure of this diſeaſe are owing to patients not continuing to uſe the medicine long enough. They are generally directed to take it till the fits are ſtopped, then to leave it off, and begin again at ſome diſtance of time; by which means the diſeaſe gathers ſtrength, and often returns with as much violence as before. A relapſe may always be prevented, and the cure greatly facilitated, by uſing the following infuſion for ſome conſiderable time as a drink: Take an ounce of gentian root; of calamus aromaticus, and orange-peel, each half an ounce, with three or four handfuls of camomile flowers, and an handful of coriander-ſeed, all bruiſed together in a mortar; put half a handful of theſe ingredients into a tea-pot, and pour thereon a pint of boiling water. A large tea-cup full of this infuſion ſhould be drunk three or four times a day; by which means a ſmaller quantity of bark than is generally uſed will be ſufficient to cure an ague. There is no doubt but many of our own plants or barks, which are very bitter and aſtringent, would ſucceed in the cure of intermittent fevers, eſpecially when aſſiſted by aromatics; and it is only by the uſe of ſundry of thoſe herbs recommended in the Herbal as antidotes againſt agues, that many old women in country places ſo effectually cure the ague, after it has baffled every exertion of the doctor. In obſtinate agues, when the patient is old, the habit phlegmatic, the ſeaſon rainy, the ſituation damp, or the like, it will be neceſſary to add to the above two ounces of the bark, half an ounce of Virginian ſnake-root, and a quarter of an ounce of ginger, or ſome other warm aromatic; or, if the ſymptoms be of an inflammatory nature, half an ounce of ſalt of wormwood or ſalt of tartar may be added to the above quantity of bark. As autumnal and winter agues generally prove much more obſtinate than thoſe which attack the patient in ſpring or ſummer, it will be neceſſary to continue the uſe of the foregoing medicines longer in the former than in the latter. If agues are not properly cured, they often degenerate into obſtinate chronical diſeaſes, as the dropſy, jaundice, &c. For this reaſon all poſſible care ſhould be taken to have them radically cured, before the humours be vitiated, and the conſtitution ſpoiled. To prevent agues, people ſhould endeavour to avoid their cauſes. The following preventive medicine may however be of uſe to ſuch as are obliged to live in low marſhy countries, or who are liable to frequent attacks of this diſeaſe. Take an ounce of the beſt Peruvian bark; Virginian ſnake-root, and orange-peel, of each half an ounce; bruiſe them all together, and infuſe for five or ſix days in a bottle of brandy, Holland gin, or wine; afterwards pour off the clear liquor, and take a wine-glaſs of it twice or thrice a-day. Thoſe who can bring themſelves to chew the bark will find that method ſucceed very well. Gentian-root, or calamus-aromaticus, may alſo be chewed by turns for the ſame purpoſe. All bitter herbs are antidotes to agues, eſpecially thoſe that are warm and aſtringent.

## OF AN ACUTE CONTINUAL FEVER.

THIS fever is denominated acute, ardent, or inflammatory. It moſt commonly attacks the young, or perſons about the prime or vigour of life, eſpecially ſuch as live high, abound with blood, and whoſe fibres are ſtrong and elaſtic. It ſeizes people at all ſeaſons of the year; but is moſt frequent in the ſpring and beginning of ſummer. It may be occaſioned by any thing that overheats the body, or produces plethora; as violent exerciſe, ſleeping in the ſun, drinking ſtrong liquors, eating ſpiceries, a full diet, with little exerciſe, &c. It may likewiſe be occaſioned by whatever obſtructs the perſpiration; as lying on the damp ground, drinking cold liquor when the body is hot, night-watching, or the like.

CURE.---As this diſeaſe is always attended with danger, the beſt medical aſſiſtance ought to be procured as ſoon as poſſible; and ſuch medicines ſhould be uſed as are calculated to dilute the blood, correct the acrimony of the humours, allay the exceſſive heat, remove the ſpaſmodic ſtricture of the veſſels, and promote the ſecretions. For this purpoſe let the patient drink plentifully of diluting liquors; as water-gruel, or oatmeal-tea, clear whey, barley-water, baum-tea, apple-tea; which may be ſharpened with juice of orange, jelly of currants, raſpberries, and ſuch like. If the patient be coſtive, an ounce of tamarinds, with two ounces of ſtoned raiſins of the ſun, and a couple of figs, may be boiled in three Engliſh pints of water to a quart. This makes a very pleaſant drink, and may be uſed at diſcretion. The patient's diet muſt be very ſpare and light; and it will afford him great relief, eſpecially in a hot ſeaſon, to have freſh air frequently let into his chamber. This, however, muſt be done in ſuch a manner as not to endanger his catching cold. It is too common in fevers to load the patient with bed-clothes, under the pretence of making him ſweat, or defending him from the cold. This cuſtom has many ill effects. It increaſes the heat of the body, fatigues the patient, and retards inſtead of promoting the perſpiration. In this and all other fevers, attended with a hard, full, quick, pulſe, bleeding is of the greateſt importance. This operation ought always to be performed as ſoon as the ſymptoms of an inflammatory fever appear. The quantity of blood to be taken away muſt be in proportion to the ſtrength of the patient and the violence of the diſeaſe. If after the firſt bleeding the fever ſhould riſe, and the pulſe become more frequent and hard, there will be a neceſſity for repeating it a ſecond, and perhaps a third, or even a fourth, time, which may be done at the diſtance of twelve, eighteen, or twenty-four, hours from each other, as the ſymptoms require. If the pulſe continues ſoft, and the patient is tolerably eaſy after the firſt bleeding, it ought not to be repeated. If the heat and fever be very great, forty or fifty drops of the dulcified or ſweet ſpirit of nitre may be made into a draught, with an ounce of roſe-water, two ounces of common water, and half an ounce of ſimple ſyrup, or a bit of loaf-ſugar. This draught may be given to the patient every three or four hours, while the fever is violent; afterwards, once in five or ſix hours will be ſufficient. If about the tenth, eleventh, or twelfth, day, the pulſe becomes more ſoft, the tongue moiſter, and the urine begins to let fall a reddiſh ſettlement, there is reaſon to expect a favourable iſſue to the diſeaſe. But if, inſtead of theſe ſymptoms, the patient's ſpirits grow languid, his pulſe ſinks, and his breathing becomes difficult, with a ſtupor, trembling of the nerves, ſtarting of the tendons, &c. there is reaſon to fear that the conſequences will be fatal. In this caſe bliſters muſt be applied to the head, ancles, inſide of the legs or thighs, as there may be occaſion; poultices of wheat-bread, muſtard, and vinegar, may likewiſe be applied to the ſoles of the feet, and the patient muſt be ſupported with cordials, as ſtrong white-wine whey, negus, ſago-gruel with wine in it, and ſuch like. Should the patient recover, he ought to take ſome gentle laxative. An ounce of tamarinds and a drachm of ſena may be boiled for a few minutes in a pint of water, and an ounce of manna diſſolved in the decoction; afterwards it may be ſtrained, and a tea-cup full drunk every hour till it operates. This doſe may be repeated twice or thrice, five or ſix days intervening betwixt each, and the patient ſhould be kept eaſy till his ſtrength and ſpirits are ſufficiently recruited.

## OF THE PLEURISY.

THE pleuriſy is an inflammation of that membrane called the *pleura*, which lines the inſide of the breaſt. It may be occaſioned by whatever obſtructs the perſpiration: as cold northerly winds; drinking cold liquors when the body is hot; ſleeping without doors on the damp ground; wet clothes; plunging the body into cold water, or expoſing it to the cold air, when covered with ſweat, &c. It may likewiſe be occaſioned by drinking ſtrong liquors; by the ſtoppage of uſual evacuations; as old ulcers, iſſues, ſweating of the feet or hands, &c. the ſudden ſtriking in of any eruption, as the itch, the meaſles, or the ſmall-pox. A pleuriſy may likewiſe be occaſioned by violent exerciſe, as running, wreſtling, leaping, or by ſupporting great weights, blows on the breaſt, &c. The pulſe in this diſeaſe is commonly quick and hard, the urine high-coloured; and if blood be let it is covered with a tough cruſt, or buffy coat. The patient's ſpittle is at firſt thin, but afterwards it becomes groſſer, and is often ſtreaked with blood.

CURE.---Nature generally endeavours to carry of this diſeaſe by a critical diſcharge of blood from ſome part of the body, by expectoration, ſweat, looſe ſtools, thick urine, or the like. We ought therefore to ſecond her intentions by leſſening the force of the circulation, relaxing the veſſels, diluting the humours, and promoting expectoration. Copious bleeding, in the beginning of a pleuriſy, has a much better effect than repeated ſmall bleedings. A man may loſe twelve or fourteen ounces of blood as ſoon as it is certainly known that he is ſeized with a pleuriſy. For a younger perſon, or one of a delicate conſtitution, the quantity muſt be leſs. If, after the firſt bleeding, the ſtitch, with the other violent ſymptoms, ſhould continue, it will be neceſſary, at the diſtance of twelve or eighteen hours, to let eight or nine ounces more. If the ſymptoms do not then abate, and the blood ſhews a ſtrong buffy coat, a third, or even a fourth, bleeding may be requiſite. But this operation is ſeldom neceſſary after the third or fourth day of the fever, and ought not then to be performed, unleſs in the moſt urgent circumſtances. The blood may be attenuated without bleeding; and the pain of the ſide abated by fomenting, bliſtering, &c. Fomentations may be made by boiling a handful of the flowers of elder, camomile, and common mallows, or any other ſoft vegetables, recommended for this complaint in the Herbal. The herbs may be either put into a flannel bag, and applied warm to the ſide, or flannels may be dipped in the decoction, afterwards rung out, and applied to the part affected, with as much warmth as the patient can eaſily bear. Fomentations not only eaſe the pain, but relax the veſſels, and prevent the ſtagnation of the blood and other humours. Leaves of various plants might likewiſe be applied to the patient's ſide with advantage. I have often ſeen great benefit from young cabbage-leaves applied warm to the ſide in a pleuriſy. Theſe not only relax the parts, but likewiſe draw off a little moiſture, and may prevent the neceſſity of bliſtering plaſters; which, however, when other things fail, muſt be applied. What is called the criſis, or height of the fever, is ſometimes attended with very alarming ſymptoms, as difficulty of breathing, an irregular pulſe, convulſive motions, &c. Theſe are apt to frighten the attendants, and induce them to do improper things, as bleeding the patient, giving him ſtrong ſtimulating medicines, or the like. But they are only the ſtruggles of Nature to overcome the diſeaſe, in which ſhe ought to be aſſiſted by plenty of diluting drink, which is then peculiarly neceſſary. If the patient's ſtrength however be much exhauſted by the diſeaſe, it will be neceſſary at this time to ſupport him with ſmall draughts of white-wine whey, negus, or the like. When the pain and fever are gone, it will be proper, after the patient has recovered ſufficient ſtrength, to give him ſome gentle purges. He ought likewiſe to uſe a light diet of eaſy digeſtion, and his drink ſhould be of a cleanſing nature.

The *paraphrentis*, or inflammation of the diaphragm, is ſo nearly connected with the pleuriſy, and reſembles it ſo much in the manner of treatment, that it is ſcarcely neceſſary to conſider it as a ſeparate diſeaſe. It is attended with a very acute fever, and an extreme pain of the part affected, which is generally augmented by coughing, ſneezing, drawing in the breath, taking food, going to ſtool, making water, &c. Hence the patient breathes quick, and draws in his bowels to prevent the motion of the diaphragm; is reſtleſs, anxious, has a dry cough, a hiccup, and often a delirium. Every method ſhould be taken to prevent a ſuppuration, as it is impoſſible to ſave the patient's life when this happens. The regimen and medicine are in all reſpects the ſame as in the pleuriſy. We ſhall only add, that in this diſeaſe emollient clyſters are peculiarly uſeful, as they relax the bowels, and by that means make a derivation from the part affected.

## OF INFLAMMATIONS OF THE LUNGS.

THIS diſeaſe is generally fatal to thoſe who have a flat breaſt, or narrow cheſt, and to ſuch as are afflicted with an aſthma, eſpecially in the decline of life. Sometimes the inflammation reaches to one lobe of the lungs only, at other times the whole organ is affected; in which caſe the diſeaſe can hardly fail to prove fatal. An inflammation of the lungs is ſometimes a primary diſeaſe, and ſometimes it is the conſequence of other diſeaſes, as a quinſey, a pleuriſy, &c. Moſt of the ſymptoms of a pleuriſy likewiſe attend an inflammation of the lungs; only in the latter the pulſe is more ſoft, and the pain leſs acute; but the difficulty of breathing, and oppreſſion of the breaſt, are generally greater.

CURE.---Bleeding and purging are generally proper at the beginning of this diſeaſe; but, if the patient's ſpittle is pretty thick, as well as concocted, neither of them are neceſſary. It will be ſufficient to aſſiſt the expectoration by ſome of the ſharp medicines recommended for that purpoſe in the pleuriſy; bliſters ought to be applied pretty early. If the patient does not ſpit, he muſt be bled according as his ſtrength will permit, and have a gentle purge adminiſtered. Afterwards his body may be kept open by clyſters, and the expectoration promoted, by taking every four hours two table-ſpoonfuls of the ſolution of gum ammoniac, with oxymel of ſquills, &c. When an inflammation of the breaſt does not yield to bleeding, bliſtering, and other evacuations, it commonly ends in a ſuppuration, which is more or leſs dangerous according to the part where it is ſituated. When this happens in the pleura, it ſometimes breaks outwardly, and the matter is diſcharged from the wound. If the ſuppuration happens within the ſubſtance or body of the lungs, the matter may be diſcharged by expectoration; but, if the matter floats in the cavity of the breaſt, between the pleura and the lungs, it can only be diſcharged by an inciſion made betwixt the ribs. If the patient's ſtrength does not return after the inflammation is to all appearance removed; if his pulſe continues quick though ſoft, his breathing difficult and oppreſſed; if he has cold ſhiverings at times, his cheeks fluſhed, his lips dry; and if he complains of thirſt, and want of appetite; there is reaſon to fear a ſuppuration, and that a conſumption of the lungs will enſue; the proper treatment of which we ſhall next conſider.

## Of CONSUMPTIONS.

CONSUMPTIONS prevail more in England than in any other part of the world; owing perhaps to the great uſe of animal food and malt liquors, the general application to ſedentary employments, and the great quantity of pit-coal which is burnt; to which we may add the perpetual changes in the atmoſphere, or variableneſs of the weather. As this diſeaſe ſo frequently proves fatal, we ſhall point out its cauſes, in order that people may as much as poſſible endeavour to guard againſt it: theſe are, confined or unwholeſome air; violent paſſions, exertions, or affections of the mind; grief, diſappointment, anxiety, or cloſe application to ſtudy:---great evacuations; as ſweating, diarrhœas, diabetes, exceſſive venery, the fluor albus, an over diſcharge of the menſtrual flux, giving ſuck too long:---alſo the ſudden ſtoppage of cuſtomary evacuations; as the bleeding piles, ſweating of the feet, bleeding at the noſe, the menſes, iſſues, ulcers, or eruptions of any kind. Conſumptions are likewiſe caught by ſleeping with the diſeaſed; for which reaſon this ſhould be carefully avoided; but more conſumptive patients date the beginning of their diſorders from wet feet, damp beds, night air, wet clothes, or catching cold after the body has been heated, than from all other cauſes put together. This diſeaſe however is ſometimes owing to an hereditary taint, or a ſcrophulous habit; in which caſe it is generally incurable---yet, let none deſpair.

CURE.---On the firſt appearance of a conſumption, if the patient lives in any place where the air is confined, he ought immediately to quit it, and to make choice of a ſituation in the country, where the air is pure and free. Here he muſt not remain inactive, but take every day as much exerciſe as he can bear. It is a pity thoſe who attend the ſick ſeldom recommend riding in this diſeaſe, till the patient is either unable to bear it, or the malady has become incurable: patients are likewiſe apt to trifle with themſelves. They cannot ſee how one of the common actions of life ſhould prove a remedy in an obſtinate diſeaſe, and therefore they reject it, while they greedily hunt after relief from medicine, merely becauſe they do not underſtand it. Next to proper air and exerciſe, a due attention ſhould be paid to diet, which ought to be calculated to leſſen the acrimony of the humours, and to nouriſh and ſupport the patient. For this purpoſe he ſhould keep chiefly to the uſe of vegetables and milk. Milk alone is of more value in this diſeaſe than the whole *materia medica.* Aſſes milk is commonly reckoned preferable to any other; but it cannot always be obtained; beſides, it is generally taken in very ſmall quantity; whereas, to produce any effects, it ought to make a conſiderable part of the patient's food. Some extraordinary cures in conſumptive caſes have been performed by women's milk; and, could it be obtained in ſufficient quantity, we would recommend it in preference to any other. It is better if the patient can ſuck it from the breaſt, than to drink it afterwards. A man who was reduced to ſuch a degree of weakneſs in a conſumption, as not to be able to turn in bed, ſucked his wife's breaſts, not with a view to reap any advantage from the milk, but to make her eaſy. Finding himſelf however greatly benefited by it, he continued to ſuck her till he became perfectly well, and is at preſent a ſtrong and healthy man. Some prefer butter-milk to any other, and it is indeed a very valuable medicine, if the ſtomach be able to bear it. It does not agree with every perſon at firſt; and is therefore often laid aſide without a ſufficient trial. It ſhould at firſt be taken ſparingly, and the quantity gradually increaſed, until it comes to be almoſt the ſole food. I never knew it ſucceed unleſs where the patient almoſt lived upon it. Wholeſome air, proper exerciſe, and a diet conſiſtent therewith, is the only courſe that can be depended on in a beginning conſumption. If the patient has ſtrength and ſufficient reſolution to perſiſt in ſuch a courſe, he will ſeldom be diſappointed of a cure. In the firſt ſtage of a conſumption, the cough may ſometimes be appeaſed by bleeding; and the expectoration may be promoted by the following medicines. Take freſh ſquills, gum-ammoniac, and powdered cardamum-ſeeds, of each a quarter of an ounce; beat them together in a mortar, and, if the maſs prove too hard for pills, a little of any kind of ſyrup may be added to it. This may be formed into pills of a moderate ſize, and four or five of them taken twice or thrice a-day, according as the patient's ſtomach will bear them. A mixture made of equal parts of lemon-juice, fine-honey, and ſyrup of poppies, may likewiſe be uſed. Four ounces of each of theſe may be ſimmered together in a ſaucepan, over a gentle fire, and a table-ſpoonful of it taken at any time when the cough is troubleſome. It is common in this ſtage of the diſeaſe to load the patient's ſtomach with oily and balſamic medicines.

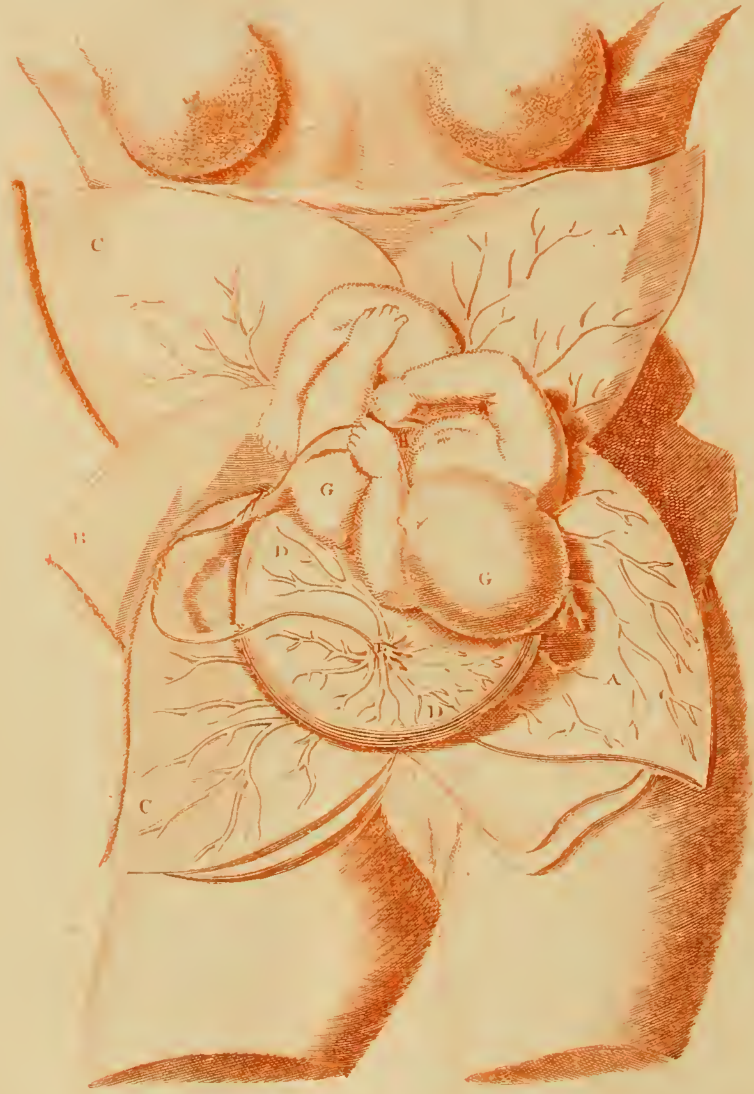
dicines. Theſe, inſtead of removing the cauſe of the diſeaſe, tend rather to increaſe it, by heating the blood, while they pall the appetite, relax the ſolids, and prove every way hurtful to the patient. Whatever is uſed for removing the cough, beſides riding and other proper regimen, ought to be medicines of a ſharp and cleanſing nature; as oxymel, ſyrup of lemon, &c. For the patient's drink we ſhould recommend infuſions of the bitter plants mentioned in the Herbal, ſuch as ground-ivy, the ſmaller centaury, camomile flowers, water trefoil, &c. Theſe infuſions may be drunk at pleaſure. They ſtrengthen the ſtomach, promote digeſtion, rectify the blood, and at the ſame time anſwer all the purpoſes of dilutition, and quench thirſt much better than things that are luſcious or ſweet. But, if the patient ſpits blood, he ought to uſe, for his ordinary drink, infuſions or decoctions of the vulnerary roots, plants, &c. There are many other mucilaginous plants and ſeeds of a healing and agglutinating nature, recommended in the Herbal, from which decoctions or infuſions may be prepared with the ſame intention; as the orches, the quince-ſeed, coltsfoot, linſeed, ſarſaparilla, &c. The conſerve of roſes is here peculiarly proper. It may either be put into the decoction above preſcribed, or eaten by itſelf. No benefit is to be expected from trifling doſes of this medicine. It ſeldom proves of any ſervice, unleſs three or four ounces at leaſt are uſed daily for a conſiderable time. In this way I have ſeen it produce very happy effects, and would recommend it wherever there is a diſcharge of blood from the lungs. When the ſpitting up of groſs matter, oppreſſion of the breaſt, and the hectic ſymptoms, ſhew that an impoſthume is formed in the lungs, the Peruvian bark is the only drug which has any chance to counteract the general tendency which the humours then have to putrefaction. An ounce of it in powder may be divided into eighteen or twenty doſes, of which one may be taken every three hours through the day, in a little ſyrup, or a cup of horehound tea. We would not recommend the bark while there are any ſymptoms of an inflammation of the breaſt; but, when it is certainly known that matter is collected there, it is one of the beſt medicines which can be uſed. Few patients indeed have reſolution enough to give the bark a fair trial at this period of the diſeaſe, otherwiſe we have reaſon to believe that great benefit might be reaped from it.

A NERVOUS CONSUMPTION is a waſting or decay of the whole body, without any conſiderable degree of fever, cough, or difficulty of breathing. It is attended with indigeſtion, weakneſs, and want of appetite, &c. Thoſe who are of a fretful temper, who indulge in ſpirituous liquors, or who breathe an unwholeſome air, are moſt liable to this diſeaſe. We would recommend, for the cure of a nervous conſumption, a light and nouriſhing diet, plenty of exerciſe in a free open air, and the uſe of ſuch bitters as brace and ſtrengthen the ſtomach; as the Peruvian bark, gentian root, camomile, horehound, &c. Theſe may be infuſed in water or wine and a glaſs of it drunk frequently. Agreeable amuſements, cheerful company, and riding about, are preferable to all medicines in this diſeaſe. For which reaſon, when the patient can afford it, we would recommend a long journey of pleaſure, as the moſt likely means to reſtore his health. What is called *ſymptomatic conſumption* cannot be cured without firſt removing the diſeaſe by which it is occaſioned. Thus, when a conſumption proceeds from the ſcrophula or king's-evil, from the ſcurvy, the aſthma, the venereal diſeaſe, &c. a due attention muſt be paid to the malady from whence it ariſes, and the regimen and medicine directed accordingly. When exceſſive evacuations of any kind occaſion a conſumption, they muſt not only be reſtrained, but the patient's ſtrength muſt be reſtored by gentle exerciſe, nouriſhing diet, and generous cordials. Young and delicate mothers often fall into conſumptions by giving ſuck too long. As ſoon as they perceive their ſtrength and appetite begin to fail, they ought immediately to wean the child, or provide another nurſe, otherwiſe they cannot expect a cure.

## Of the SLOW or NERVOUS FEVER.

NERVOUS FEVERS may be occaſioned by whatever depreſſes the ſpirits, or impoveriſhes the blood; as grief, fear, anxiety, want of ſleep, intenſe thought, living on poor watery diet, unripe fruits, cucumbers, melons, muſhrooms, &c. They may likewiſe be occaſioned by damp, confined, or unwholeſome, air. Hence they are very common in rainy ſeaſons, and prove moſt fatal to thoſe who live in dirty, low, houſes, crowded ſtreets, hoſpitals, jails, or ſuch-like places. Perſons whoſe conſtitutions have been broken by exceſſive venery, frequent ſalivations, too free an uſe of purgative medicines, or any other exceſſive evacuations, are very liable to this diſeaſe.

CURE.---The patient muſt not be kept too low. His ſtrength and ſpirits ought to be ſupported by nouriſhing diet and cordials. For this purpoſe his gruel, panada, or whatever food he takes, muſt be mixed with wine according as the ſymptoms may require. Pretty ſtrong white-wine whey, or ſmall negus, ſharpened with the juice of orange or lemon, will be proper for his ordinary drink. Where a nauſea, load, and ſickneſs at ſtomach, prevail at the beginning of a fever, it will be neceſſary to give the patient a gentle vomit. Fifteen or twenty grains of ipecacuana in fine powder will generally anſwer this purpoſe very well. This may be repeated any time before the third or fourth day, if the above ſymptoms continue. Vomits not only clean the ſtomach, but, by the general ſhock which they give, promote the perſpiration, and have many other excellent effects in ſlow fevers, where there are no ſigns of inflammation, and nature wants rouſing. Such as dare not venture upon a vomit, may clean the bowels by a ſmall doſe of Turkey rhubarb, or infuſion of ſenna and manna. In all fevers,



Poſition of a Child in the Womb juſt before Delivery.

Dodd Delin

Prattent Sculp.

fevers, the great point is to regulate the ſymptoms, ſo as to prevent them from going to either extreme. Thus, in fevers of the inflammatory kind, where the force of the circulation is too great, or the blood denſe, and the fibres too rigid, bleeding and other evacuations are neceſſary. But, in nervous fevers, where nature flags, where the blood is vapid and poor, and the ſolids relaxed, the lancet muſt be ſpared, and wine, with other cordials, plentifully adminiſtered. Though bleeding is generally improper in this diſeaſe, yet bliſtering is highly neceſſary. Bliſters may be applied at all times of the fever with great advantage. If the patient is delirious, he ought to be bliſtered on the neck or head; and, it will be the ſafeſt courſe, while the inſenſibility continues, as ſoon as the diſcharge occaſioned by one bliſter abates, to apply another to ſome other part of the body, and by that means keep up a continual ſucceſſion of them till he be out of danger. A miliary eruption ſometimes breaks out about the ninth or tenth day. As eruptions are often critical, great care ſhould be taken not to retard Nature's operation in this particular. The eruption ought neither to be checked by bleeding nor other evacuations, nor puſhed out by a hot regimen; but the patient ſhould be ſupported by gentle cordials, as wine-whey, ſmall negus, ſago-gruel with a little wine in it, and ſuch-like. He ought not to be kept too warm; yet a kindly breathing ſweat ſhould by no means be checked. In deſperate caſes, where the hiccup and ſtarting of the tendons have already come on, we have ſometimes ſeen extraordinary effects from large doſes of muſk frequently repeated. Muſk is doubtleſs an antiſpaſmodic, and may be given to the quantity of a ſcruple three or four times a-day, or oftener if neceſſary. Sometimes it may be proper to add to the muſk a few grains of camphire, and ſalt of hartſhorn, as theſe tend to promote perſpiration and the diſcharge of urine. Thus fifteen grains of muſk, with three grains of camphire, and ſix grains of ſalt of hartſhorn, may be made into a bolus with a little ſyrup, and given as above. If the fever ſhould intermit, which it frequently does towards the decline, or if the patient's ſtrength ſhould be waſted with colliquative ſweats, &c. it will be neceſſary to give him the Peruvian bark. Half a drachm, or a whole drachm if the ſtomach will bear it, of the bark in fine powder, may be given four or five times a-day, in a glaſs of red-port or claret. Should the bark in ſubſtance not ſit eaſy on the ſtomach, an ounce of it in powder may be infuſed in a bottle of Liſbon or Rheniſh wine for two or three days; afterwards it may be ſtrained, and a glaſs of it taken frequently.

## OF THE MALIGNANT, PUTRID, OR SPOTTED, FEVER.

THIS fever is occaſioned by foul air, from a number of people being confined in a narrow place, not properly ventilated; from putrid animal and vegetable effluvia, &c. Hence it prevails in camps, jails, hoſpitals, and infirmaries, eſpecially where ſuch places are too much crowded, and cleanlineſs is neglected. Putrid, malignant, or ſpotted, fevers, are highly infectious; and are therefore often communicated by contagion. For which reaſon all perſons ought to keep at a diſtance from thoſe affected with ſuch diſeaſes, unleſs their attendance is abſolutely neceſſary. Putrid fevers may be diſtinguiſhed from the inflammatory by the ſmallneſs of the pulſe, the great dejection of mind, the diſſolved ſtate of the blood, the petechiæ, or purple ſpots, and the putrid ſmell of the excrements. They may likewiſe be diſtinguiſhed from the low or nervous fever by the heat and thirſt being greater, the urine of a higher colour, and the loſs of ſtrength, dejection of mind, and all the other ſymptoms, more violent.

CURE.---The duration of putrid fevers is extremely uncertain; ſometimes they terminate betwixt the ſeventh and fourteenth day, and at other times they are prolonged for five or ſix weeks. Their duration depends greatly upon the conſtitution of the patient, and the manner of treating the diſeaſe; in which we ought to endeavour, as much as poſſible, to counteract the putrid tendency of the humours; to ſupport the patient's ſtrength and ſpirits; and to aſſiſt nature in expelling the cauſe of the diſeaſe, by gently promoting perſpiration and the other evacuations. Beſides the frequent admiſſion of freſh air, which is extremely neceſſary, we would recommend the uſe of vinegar, verjuice, juice of lemon, Seville-orange, or any kind of vegetable acid that can be moſt readily obtained. Theſe ought frequently to be ſprinkled upon the floor, the bed, and every part of the room. The freſh ſkins of lemons or oranges ought likewiſe to be laid in different parts of the room, and they ſhould be frequently held to the patient's noſe. The uſe of acids in this manner would not only prove very refreſhing to the patient, but would likewiſe tend to prevent the infection from ſpreading among thoſe who attend him. Strong-ſcented herbs, as rue, tanſy, roſemary, wormwood, &c. may likewiſe be laid in different parts of the houſe, and ſmelled to by thoſe who go near the patient. If a vomit be given at the beginning of this fever, it will hardly ever fail to have a good effect; but, if the fever has gone on for ſome days, and the ſymptoms are violent, vomits are not ſo ſafe. The body however is always to be kept gently open by clyſters, or mild laxative medicines. Bleeding is ſeldom neceſſary in putrid fevers. If there be ſigns of an inflammation, it may ſometimes be permitted at the firſt onſet; but the repetition of it generally proves hurtful. Bliſters are never to be uſed unleſs in the greateſt extremities. If the petechiæ or ſpots ſhould ſuddenly diſappear, the patient's pulſe ſink remarkably, and a delirium, with other bad ſymptoms, come on, bliſtering may be permitted. In this caſe the bliſters are to be applied to the head, and inſide of the legs or thighs. But, as they are ſometimes apt to occaſion a gangrene, we would rather recommend warm cataplaſms or poultices of muſtard and vinegar to be applied to the feet, having recourſe to bliſters only in the utmoſt extremities. It is common in the beginning of this fever to give the emetic tartar in ſmall doſes, repeated every ſecond and third hour, till it ſhall either vomit, purge, or throw the patient into a ſweat. This practice is very proper, provided it be not puſhed ſo far as to weaken the patient. In the moſt dangerous ſpecies of this diſeaſe, when it is attended with purple, livid, or black, ſpots, the Peruvian bark ſhould be adminiſtered; it muſt not only be given in large doſes, but be duly perſiſted in. The beſt method of adminiſtering it is certainly in ſubſtance; but, for thoſe who cannot take it in ſubſtance, it may be infuſed in wine. For preventing putrid fevers we would recommend a ſtrict regard to cleanlineſs, a dry ſituation, ſufficient exerciſe in the open air; wholeſome food, and a moderate uſe of generous liquors. Infection above all things ought to be avoided. No conſtitution is proof againſt it; and, when a putrid fever ſeizes any perſon in a family, the greateſt attention is neceſſary to prevent the diſeaſe from ſpreading. Any one, who is apprehenſive of having caught the infection, ought immediately to take a vomit, and to work it off by drinking plentifully of camomile-tea. This may be repeated in a day or two, if the apprehenſions ſtill continue, or any unfavourable ſymptoms appear.

## OF THE MILIARY FEVER.

SO called, from the ſmall piſtules on bladders which appear on the ſkin, reſembling, in ſhape and ſize, the ſeeds of millet. The puſtules are either red or white, and ſometimes both are mixed together. It chiefly attacks the idle and the phlegmatic, or perſons of a relaxed habit. The young and the aged are more liable to it than thoſe in the vigour and prime of life. It is likewiſe more incident to women than men, eſpecially the delicate and the indolent, who, neglecting exerciſe, keep continually within doors, and live upon weak watery diet. Such females are extremely liable to be ſeized with this diſeaſe in child-bed, and often loſe their lives by it. When this is a primary diſeaſe, it makes its attack, like moſt other eruptive fevers, with a ſlight ſhivering, which is ſucceeded by heat, loſs of ſtrength, a low quick pulſe, difficulty of breathing, with great anxiety and oppreſſion of the breaſt; and in child-bed women the milk generally goes away, and the other diſcharges ſtop.

CURE.---Sometimes the miliary fever approaches towards a putrid nature, in which caſe the patient's ſtrength muſt be ſupported with generous cordials, joined with acids; and, if the degree of putreſcence be great, the Peruvian bark muſt be adminiſtered. If the head be much affected, the body muſt be kept open by emollient clyſters. If the food and drink be properly regulated, there will be little occaſion for medicine. Where nature flags, and the eruption comes and goes, it may be neceſſary to keep up a ſtimulus, by a continual ſucceſſion of ſmall bliſtering

plaſters;

plaſters; but we would not recommend above one at a time. If however the pulſe ſhould ſink remarkably, the puſtules fall in, and the head be affected, it will be neceſſary to apply ſeveral bliſters to the moſt ſenſible parts, as the inſide of the legs and thighs, &c. Bleeding is ſeldom neceſſary in this diſeaſe, and ſometimes it does much hurt, as it weakens the patient, and depreſſes his ſpirits. If the diſeaſe proves tedious, or the recovery ſlow, we ſhould recommend the Peruvian bark, which may either be taken in ſubſtance, or infuſed in wine or water, as the patient inclines. To avoid this diſeaſe, a pure dry air, ſufficient exerciſe, and wholeſome food, are neceſſary. Pregnant women ſhould guard againſt coſtiveneſs, and take daily as much exerciſe as they can bear, avoiding all green fruits, and other unwholeſome things; and, when in child-bed, they ought ſtrictly to obſerve a cool regimen.

## Of the REMITTING FEVER.

THIS fever takes its name from a remiſſion of the ſymptoms, which happens ſometimes ſooner, and ſometimes later, but generally before the eighth day. The remiſſion is commonly preceded by a gentle ſweat, after which the patient ſeems greatly relieved, but in a few hours the fever returns. Theſe remiſſions return at very irregular periods, and are ſometimes of longer, ſometimes of ſhorter, duration; the nearer however that the fever approaches to a regular intermittent, the danger is the leſs. They are moſt frequent in cloſe calm weather, eſpecially after rainy ſeaſons, great inundations, or the like. No age, ſex, or conſtitution, is exempted from the attack of this fever: but it chiefly ſeizes perſons of a relaxed habit, who live in low dirty habitations, breathe an impure ſtagnated air, take little exerciſe, and uſe unwholeſome diet. The firſt ſymptoms of this fever are pains and giddineſs in the head, with alternate fits of heat and cold. The pulſe is ſometimes a little hard, but ſeldom full, and the blood, when let, rarely ſhews any ſigns of inflammation. In order to cure this fever, endeavours ſhould be uſed to bring it to a regular intermiſſion. This intention may be promoted by bleeding, if there be any ſigns of inflammation; but, when that is not the caſe, bleeding ought by no means to be attempted, as it will weaken the patient, and prolong the diſeaſe. A vomit however will ſeldom be improper, and is generally of great ſervice. Twenty or thirty grains of ipecacuanha will anſwer this purpoſe very well; but, where it can be obtained, we would rather recommend a grain or two of emetic tartar, with five or ſix grains of ipecacuanha, to be made into a draught, and given for a vomit. This may be repeated once or twice at proper intervals, if the ſickneſs or nauſea continues. The body ought to be kept open either by clyſters or gentle laxatives, as weak infuſions of ſenna and manna, ſmall doſes of the lenitive electuary, cream of tartar, tamarinds, ſtewed prunes, or the like; but all ſtrong or draſtic purgatives are to be avoided,

avoided. By this courſe the fever in a few days may generally be brought to a pretty regular or diſtinct intermiſſion, in which caſe, the Peruvian bark may be administered, and it will ſeldom fail to perfect the cure.

## OF THE SMALL-POX.

THE ſmall-pox is commonly caught by infection. Since the diſeaſe was firſt brought from Arabia into Europe, the infection has never been wholly extinguiſhed; nor have any proper methods been taken for that purpoſe; ſo that now it has become in a manner conſtitutional. Children who have over-heated themſelves by running, wreſtling, &c. or adults after a debauch, are moſt apt to be ſeized with the ſmall-pox. The diſeaſe is ſo generally known, that a minute deſcription of it is unneceſſary. Children commonly look dull, ſeem liſtleſs and drowſy, for a few days before the more violent ſymptoms of the ſmall-pox appear. They are likewiſe more inclined to drink than uſual, have little appetite for ſolid food, complain of wearineſs, and, upon taking exerciſe, are apt to ſweat. Theſe are ſucceeded by ſlight fits of cold and heat in turns, which, as the time of the eruption approaches, become more violent, and are accompanied with pains of the head and loins, vomiting, &c. The pulſe is quick, with a great heat of the ſkin, and reſtleſſneſs. When the patient drops aſleep, he awakes in a kind of horror, with a ſudden ſtart, which is a very common ſymptom of the approaching eruption; as are alſo convulſion-fits in very young children. The moſt favourable ſymptoms are a ſlow eruption, and an abatement of the fever as ſoon as the puſtules appear. In a mild diſtinct kind of ſmall-pox, the puſtules ſeldom appear before the fourth day from the time of ſickening, and they generally keep coming out gradually for ſeveral days after. Puſtules which are diſtinct, with a florid red baſis, and which fill with thick purulent matter, firſt of a whitiſh, and afterwards of a yellowiſh, colour, are the beſt. It is a moſt unfavourable ſymptom when petechiæ, or purple, brown, or black, ſpots, are interſperſed among the puſtules. Theſe are ſigns of a putrid diſſolution of the blood, and ſhew the danger to be very great. Bloody ſtools or urine, with a ſwelled belly, are bad ſymptoms; as is alſo a continual ſtranguary. Pale urine and a violent throbbing of the arteries of the neck are ſigns of an approaching delirium, or of convulſion-fits. When the face does not ſwell, or falls before the pock comes to maturity, it is very unfavourable. If the face begins to fall about the eleventh or twelfth day, and at the ſame time the hands and feet begin to ſwell, the patient generally does well; but, when theſe do not ſucceed to each other, there is reaſon to apprehend danger.

CURE.---All that is neceſſary during the eruptive fever, is to keep the patient cool and eaſy, allowing him to drink freely of ſome weak diluting liquors; as balm-tea, barley-water, clear whey, gruels, &c. Much miſchief is done at this period by confining the patient to his bed, and plying him with warm cordials or ſudorific medicines. Every thing that heats and inflames the blood increaſes the fever, and puſhes out the puſtules prematurely. This has numberleſs ill effects. It not only increaſes the number of puſtules, but tends likewiſe to make them run into one another; and, when they have been puſhed out with too great violence, they generally fall in before they come to maturity. The food ought to be very light, and of a cooling nature, as panada, or bread boiled with equal quantities of milk and water, good apples roaſted or boiled with milk, and ſweetened with a little ſugar, or ſuch-like. The moſt dangerous period of this diſeaſe is what we call the ſecondary fever. This generally comes on when the pock begins to blacken or turn on the face, and moſt of thoſe who die of the ſmall-pox are carried off by this fever. Nature generally attempts, at the turn of the ſmall-pox, to relieve the patient by looſe ſtools. Her endeavours by this way are by no means to be counteracted, but promoted; and the patient at the ſame time ſupported by food and drink of a nouriſhing and cordial nature. If, at the approach of the ſecondary fever, the pulſe be very quick, hard, and ſtrong, the heat intenſe, and the breathing laborious, with other ſymptoms of an inflammation of the breaſt, the patient muſt immediately be bled. The quantity of blood to be let muſt be regulated by the patient's ſtrength, age, and the urgency of the ſymptoms. But, in the ſecondary fever, if the patient be faintiſh, the puſtules become ſuddenly pale, and if there be great coldneſs of the extremities, bliſters muſt be applied, and the patient muſt be ſupported with generous cordials. Wine and even ſpirits have ſometimes been given in ſuch caſes with amazing ſucceſs. It is generally neceſſary, after the ſmall-pox is gone off, to purge the patient. If however the body has been open through the whole courſe of the diſeaſe, or if butter-milk and other things of an opening nature have been drunk freely after the height of the ſmall-pox, purging becomes leſs neceſſary; but it ought never wholly to be neglected. For very young children, an infuſion of ſenna and prunes, with a little rhubarb, may be ſweetened with coarſe ſugar, and given in ſmall quantities till it operates. Thoſe who are farther advanced muſt take medicines of a ſharper nature. For example, a child of five or ſix years of age may take eight or ten grains of fine rhubarb in powder over night, and the ſame quantity of jalap in powder next morning. This may be worked off with freſh broth or water-gruel, and may be repeated three or four times, five or ſix days intervening betwixt each doſe. For children farther advanced, and adults, the doſe muſt be increaſed in proportion to the age and conſtitution. When a cough, a difficulty of breathing, or other ſymptoms of a conſumption, ſucceed to the ſmall-pox, the patient muſt be ſent to a place where the air is good, and put upon a courſe of aſſes milk, with ſuch other treatment as hath already been directed in conſumptions.

## OF INOCULATION.

THIS ſalutary invention, which is the only effectual means of ſtopping the ravages of the ſmall-pox, has been known in Europe above half a century; yet, like moſt other uſeful diſcoveries, it has, till of late, made but ſlow progreſs. No diſcovery can be of general utility, while the practice of it is kept in the hands of a few. The fears, the jealouſies, the prejudices, and the oppoſite intereſts, of the faculty, are, and ever will be, the moſt effectual obſtacles to the progreſs of any ſalutary diſcovery. Hence it is that the practice of inoculation never became, in any meaſure, general, even in England, till taken up by men not bred to phyſic. Theſe have not only rendered the practice more extenſive, but likewiſe more ſafe, and, by acting under leſs reſtraint than the regular practitioners, have taught them that the patient's greateſt danger aroſe, not from the *want* of medical care, but from the *exceſs* of it. The preſent method of inoculating in Britain is to make two or three ſlanting inciſions in the arm, ſo ſuperficial as not to pierce quite through the ſkin, with a lancet wet with freſh matter taken from a ripe puſtule; afterwards the wounds are cloſed up, and left without any dreſſing. Some make uſe of a lancet covered with the dry matter; but this is leſs certain, and ought never to be uſed unleſs where freſh matter cannot be obtained: when this is the caſe, the matter ought to be moiſtened by holding the lancet for ſome time in the ſteam of warm water. We do not find that inoculation is at all conſidered as a medical operation in foreign countries. In Turkey, whence we learned it, it is performed by the women, and in the Eaſt Indies by the brachmins or prieſts. In this country, the cuſtom, though ſtill in its infancy, has been practiſed by numbers of the common people with aſtoniſhing ſucceſs; and, as the ſmall-pox is now become an epidemical diſeaſe in moſt parts of the known world, there ſeems no other choice left, but to render the malady as mild as poſſible. It is a matter of ſmall conſequence, whether a diſeaſe be entirely extirpated, or rendered ſo mild as neither to deſtroy life nor hurt the conſtitution; and that this may be done by inoculation, does not now admit of a doubt. The numbers who die under inoculation hardly deſerve to be named. In the natural way, one in four or five generally dies; but by inoculation not one of a thouſand. Nay, ſome can boaſt of having inoculated ten thouſand without the loſs of a ſingle patient. The moſt proper age for inoculating children is betwixt three and five. Thoſe who have conſtitutional diſeaſes may nevertheleſs be inoculated; it will often mend the habit of body; but ought to be performed at a time when they are moſt healthy. Accidental diſeaſes ſhould always be removed before inoculation. It is generally thought neceſſary to regulate the diet for ſome time before the diſeaſe be communicated. In children, however, great alteration in diet is ſeldom neceſſary, their food being commonly of the moſt ſimple and wholeſome kind, as milk, water-gruel, weak broths, bread, light pudding, mild roots, and white meats. We would recommend no other medicinal preparation than two or three mild purges, which ought to be ſuited to the age and ſtrength of the patient. The ſucceſs of inoculators does not depend on the preparation of their patients, but on their management of them while under the diſeaſe. Their conſtant care ſhould be to keep them cool, and their bodies gently open, by which means the fever is kept low, and the eruption greatly leſſened. The danger is ſeldom great when the puſtules are few; and their number is generally in proportion to the fever which precedes and attends the eruption. Hence the chief ſecret of inoculation conſiſts in regulating the eruptive fever, which generally may be kept ſufficiently low by the methods mentioned above. The regimen during the diſeaſe is in all reſpects the ſame as under the natural ſmall-pox. The patient muſt be kept cool, his diet ſhould be light, and his drink weak and diluting, &c. Should any bad ſymptoms appear, which is ſeldom the caſe, they muſt be treated in the ſame way as directed in the natural ſmall-pox. Purging is not leſs neceſſary after the ſmall-pox by inoculation than in the natural way, and ought by no means to be neglected.

## OF THE MEASLES.

THIS diſeaſe, like the ſmall-pox, proceeds from infection, and is more or leſs dangerous according to the conſtitution of the patient, the ſeaſon of the year, the climate, &c. It is uſually preceded by a ſhort cough, a heavineſs of the head and eyes, drowſineſs, and a running at the noſe. There is an inflammation and heat in the eyes, with a defluxion of ſharp tears, vomiting, and great acuteneſs of ſenſation, ſo that the patient cannot bear the light without pain. About the fourth day, ſmall ſpots, reſembling flea-bites, appear, firſt upon the face, then upon the breaſt, and afterwards on the extremities: theſe may be diſtinguiſhed from the ſmall-pox by their ſcarcely riſing above the ſkin. The fever, cough, and difficulty of breathing, inſtead of being removed by the eruption, as in the ſmall-pox, are rather increaſed; but the vomiting generally ceaſes. About the ſixth or ſeventh day from the time of ſickening, the meaſles begin to turn pale on the face, and afterwards upon the body; ſo that by the ninth day they entirely diſappear. Such as die of the meaſles generally expire about the ninth day from the invaſion, and are commonly carried off by inflammation of the lungs. The moſt favourable ſymptoms are, a moderate looſeneſs, a moiſt ſkin, and a plentiful diſcharge of urine. When the eruption ſuddenly falls in, and the patient is ſeized with a delirium, he is in the greateſt danger.

If the meaſles turn too ſoon of a pale colour, it is an unfavourable ſymptom, as are alſo great weakneſs, vomiting, reſtleſſneſs, and difficulty of ſwallowing. Purple or black ſpots appearing among the meaſles are very unfavourable. When a continual cough, with hoarſeneſs, ſucceeds the diſeaſe, there is reaſon to ſuſpect an approaching conſumption of the lungs.

CURE.---Our buſineſs in this diſeaſe is to aſſiſt nature by proper cordials, in throwing out the morbific matter, if her efforts be too languid; but when they are too violent they muſt be reſtrained by evacuations, and cool diluting liquors, &c. We ought likewiſe to endeavour to appeaſe the moſt urgent ſymptoms, as the cough, reſtleſſneſs, and difficulty of breathing. A cool regimen is neceſſary here, as well as in the ſmall-pox. The food too muſt be light, and the drink diluting. The moſt ſuitable liquors are decoctions of liquorice with marſh-mallow roots and ſarſaparilla, infuſions of linſeed, marygolds, elder-flowers, balm-tea, clarified whey, barley-water, and ſuch-like. Bleeding is commonly neceſſary, particularly when the fever runs high, with difficulty of breathing, and great oppreſſion of the breaſt; but, if the diſeaſe be of a mild kind, bleeding may be omitted. If at the turn of the diſeaſe the fever aſſumes new vigour, and there appears great danger of ſuffocation, bleeding muſt be repeated according to the patient's ſtrength, and bliſters muſt be applied, with a view to prevent the load from being thrown on the lungs, where if an inflammation ſhould fix itſelf, the patient's life will be in imminent danger. In caſe the meaſles ſhould ſuddenly diſappear, the patient muſt be ſupported with wine and cordials. Bliſters muſt be applied to the legs and arms, and the body rubbed all over with warm flannels. Should a cough, with difficulty of breathing, and other ſymptoms of a conſumption, remain after the meaſles, ſmall quantities of blood may be frequently let at proper intervals, as the patient's ſtrength and conſtitution will permit. He ought likewiſe to drink aſſes milk, to remove to a free air, and to ride daily on horſeback.

## OF THE SCARLET FEVER.

THE ſcarlet fever is ſo called from the colour of the patient's ſkin, which appears as if it were tinged with red wine. It begins, like other fevers, with coldneſs and ſhivering, without any violent ſickneſs. Afterwards the ſkin is covered with red ſpots, which are broader, more florid, and leſs uniform, than the meaſles. They continue two or three days, and then diſappear; after which the cuticle, or ſcarf-ſkin, falls off.

CURE.---There is ſeldom any occaſion for medicine in this diſeaſe, unleſs it is attended with putrid or malignant ſymptoms, in which caſe it is always dangerous; the patient is then not only affected with coldneſs and ſhivering, but with languor, ſickneſs, and great oppreſſion; to theſe ſucceed exceſſive heat, nauſea, and vomiting, with a ſoreneſs of the throat; the pulſe is extremely quick, but ſmall and depreſſed; the breathing frequent and laborious; the ſkin hot, but not quite dry; the tongue moiſt, and covered with a whitiſh mucus; the tonſils inflamed and ulcerated. When the eruption appears, it brings no relief: on the contrary, the ſymptoms generally grow worſe, and freſh ones come on, as purging, delirium, &c. Should this diſeaſe be miſtaken for a ſimple inflammation, and treated with repeated bleedings, purging and cooling medicines, as is ſometimes the caſe, it generally proves fatal. The only medicines that can be depended on are cordials and antiſeptics, as the Peruvian bark, wine, ſnake-root, and the like. The treatment muſt be in general ſimilar to that of the putrid fever, or of the malignant ulcerous ſore throat.

## OF THE BILIOUS FEVER.

A CONTINUAL remitting or intermitting fever, accompanied with a copious evacuation of bile, either by vomit or ſtool, is denominated *bilious*. It generally makes its appearance about the end of ſummer, and ceaſes towards the approach of winter. It is moſt fatal in warm countries, eſpecially where the ſoil is marſhy, and when great rains are ſucceeded by ſultry heats. Thoſe who work without doors, and are expoſed to the night air, are moſt liable to this kind of fever.

CURE.---If there are ſymptoms of inflammation, it will be neceſſary to bleed, and to put the patient upon cool diluting regimen, recommended in the inflammatory fever. Saline draughts may likewiſe be frequently adminiſtered, and the patient's body kept open by clyſters or mild purgatives. But, if the fever ſhould remit or intermit, bleeding will ſeldom be neceſſary. In this caſe a vomit may be adminiſtered, and, if the body be bound, a gentle purge; after which the Peruvian bark will generally complete the cure.

## OF THE ERYSIPELAS, OR ST. ANTHONY's FIRE.

THE eryſipelas may be occaſioned by violent paſſions or affections of the mind; as fear, anger, &c. When the body has been heated to a great degree, and is immediately expoſed to the cold air, ſo that the perſpiration is ſuddenly checked, an eryſipelas will often enſue. It may alſo be occaſioned by drinking to exceſs, by continuing too long in a warm bath, or by any thing that over-heats the blood. If any of the natural evacuations be obſtructed, or in too ſmall quantity, it may cauſe an eryſipelas. The ſame effect will follow from the ſtoppage of artificial evacuations; as iſſues, ſetons, or the like. The diſorder comes on with ſhivering, thirſt, loſs of ſtrength, pain in the head and back, heat, reſtleſſneſs, and a quick pulſe; to which may be added vomiting, and ſometimes a delirium. On the ſecond, third, or fourth, day, the part ſwells, becomes red, and ſmall puſtules appear: at which time the fever generally abates. When the eryſipelas is large, deep, and affects a very ſenſible part of the body, the danger is great. If the red colour changes into a livid or black, it will end in a mortification. Sometimes the inflammation cannot be diſcuſſed, but comes to a ſuppuration; in which caſe fiſtulas, a gangrene, or mortification, often enſue. Such as die of this diſeaſe are commonly carried off by the fever, which is attended with difficulty of breathing, and ſometimes with a delirium and great drowſineſs. They generally die about the ſeventh or eighth day.

CURE.---In this complaint much miſchief is often done by medicines, eſpecially by external applications: whereas the principal object ſhould be to promote perſpiration, which has a great tendency to carry off the diſeaſe. It is common to bleed in the eryſipelas; but this likewiſe requires caution. If however the fever be high, the pulſe hard and ſtrong, and the patient vigorous, it will be proper to bleed; but the quantity muſt be regulated by theſe circumſtances, and the operation repeated as the ſymptoms may require. If the patient has been accuſtomed to ſtrong liquors, and the diſeaſe attacks his head, bleeding is abſolutely neceſſary. Bathing the feet and legs frequently in lukewarm water, when the diſeaſe attacks the face or brain, has an excellent effect. It tends to make a derivation from the head, and ſeldom fails to relieve the patient. When bathing proves ineffectual, poultices, or ſharp ſinapiſms, may be applied to the ſoles of the feet for the ſame purpoſe. In caſes where bleeding is requiſite, it is likewiſe neceſſary to keep the body open. This may be effected by emollient clyſters, or ſmall doſes of nitre and rhubarb. Some indeed recommend very large doſes of nitre in the eryſipelas; but nitre ſeldom ſits eaſy on the ſtomach when taken in large doſes. It is however one of the beſt medicines when the fever and inflammation run high. Half a drachm of it, with four or five grains of rhubarb, may be taken in the patient's ordinary drink, four times a day. When the eryſipelas ſeizes the head, ſo as to occaſion a delirium or ſtupor, bliſters muſt be applied to the neck, or behind the ears, and ſharp cataplaſms laid to the ſoles of the feet. In what is commonly called the *ſcorbutic eryſipelas*, which continues for a conſiderable time, it will only be neceſſary to give gentle laxatives, and ſuch things as purify the blood, and promote the perſpiration. And, after the inflammation has been checked by opening medicines, the decoction of woods and bitter herbs may be drunk, as recommended for this diſeaſe in the Herbal.

## OF THE INFLAMMATION OF THE BRAIN.

THE ſymptoms which uſually precede a true inflammation of the brain, are pain of the head, redneſs of the eyes, a violent fluſhing of the face, diſturbed ſleep, or a total want of it, great dryneſs of the ſkin, coſtiveneſs, a retention of urine, a ſmall dropping of blood from the noſe, ſinging of the ears, and extreme ſenſibility of the nervous ſyſtem. When the brain itſelf is inflamed, the pulſe is always ſoft and low; but, when the inflammation only affects the integuments of the brain, viz. the *dura* and *pia mater*, it is hard.

CURE.---As this diſeaſe often proves fatal in a few days, it requires the moſt ſpeedy applications. When it is prolonged, or improperly treated, it ſometimes ends in madneſs, or a kind of ſtupidity which continues for life. Two things are chiefly to be attended to, in the cure, viz. to leſſen the quantity of blood in the brain, and to retard the circulation towards the head. Nothing more certainly relieves the patient than a free diſcharge of blood from the noſe. When this comes of its own accord, it is by no means to be ſtopped, but rather promoted by applying cloths dipped in warm water to the part. When bleeding at the noſe does not happen ſpontaneouſly, it may be provoked by putting a ſtraw, or any other ſharp body, up the noſtril. Bleeding in the temporal arteries greatly relieves the head: but, as this operation cannot always be performed, we would recommend in its ſtead bleeding in the jugular veins. When the patient's pulſe and ſpirits are ſo low, that he cannot bear bleeding with the lancet, leeches may be applied to the temples. Theſe not only draw off the blood more gradually, but, by being applied nearer to the part affected, generally give more immediate relief. If the inflammation of the brain be occaſioned by the ſtoppage of evacuations either natural or artificial, as the menſes, iſſues, ſetons, or ſuch-like, all means muſt be uſed to reſtore them as ſoon as poſſible, or to ſubſtitute others in their ſtead. The patient's body muſt be kept open by ſtimulating clyſters or ſmart purges; and ſmall quantities of nitre ought frequently to be mixed with his drink. Two or three drachms, or more, if the caſe be dangerous, may be uſed in the ſpace of twenty-four hours. If the diſeaſe proves obſtinate, and does not yield to the medicines, it will be neceſſary to apply a bliſtering-plaſter to the whole head.

## OF THE INFLAMMATION OF THE EYES.

THIS diſorder is attended with acute pain, heat, redneſs, and ſwelling.---The patient is not able to bear the light, and ſometimes he feels a pricking pain, as if his eyes were pierced with a thorn. The pulſe is generally quick and hard, with ſome degree of fever. When the diſeaſe is violent, the neighbouring parts ſwell, and there is a throbbing or pulſation in the temporal arteries, &c. A ſlight inflammation of the eyes, eſpecially from an external cauſe, is eaſily cured; but, when the diſeaſe is violent, and continues long, it often leaves ſpecks upon the eyes, or dimneſs of ſight, and ſometimes total blindneſs.

CURE.---The patient muſt abſtain from every thing of a heating nature. His food ſhould conſiſt chiefly of mild vegetables, weak broths, and gruels. His drink may be barley-water, balm-tea, common whey, and ſuch-like. Bleeding, in a violent inflammation of the eyes, is always neceſſary. This ſhould be performed as near the part affected as poſſible. An adult may loſe ten or twelve ounces of blood from the jugular vein, and the operation may be repeated according to the urgency of the ſymptoms. If it ſhould not be convenient to bleed in the neck, the ſame quantity may be let from the arm, or any other part of the body. Leeches are often applied to the temples, or under the eyes, with good effect. The wounds muſt be ſuffered to bleed for ſome hours, and, if the bleeding ſtop ſoon, it may be promoted by the application of cloths dipped in warm water. In obſtinate caſes, it will be neceſſary to repeat this operation ſeveral times. Opening and diluting medicines are by no means to be neglected; but, if the inflammation does not yield to theſe evacuations, bliſters muſt be applied to the temples, behind the ears, or upon the neck, and kept open for ſome time. I have ſeldom known theſe, if long enough kept open, fail to remove the moſt obſtinate inflammation of the eyes; but, for this purpoſe, it is often neceſſary to continue the diſcharge for ſeveral weeks. Thoſe who are liable to frequent returns of this diſeaſe, ought conſtantly to have an iſſue in one or both arms, or a ſeton cut betwixt the ſhoulders. Bleeding or purging in the ſpring and autumn will be very beneficial to ſuch perſons.

## OF THE QUINSEY, OR INFLAMMATORY SORE THROAT.

THIS diſeaſe is frequently attended with great danger. When the inflammation comes on, the parts appear red and ſwelled; the patient complains of pain in ſwallowing; his pulſe is quick and hard, with other ſymptoms of a fever. If blood be let, it is generally covered with a tough coat of a whitiſh colour, and the patient ſpits a tough phlegm. As the ſwelling and inflammation increaſe, the breathing and ſwallowing become more difficult; the pain affects the ears; the eyes generally appear red; and the face ſwells. When the breathing is laborious, with ſtraightneſs of the breaſt, and anxiety, the danger is great. Though the pain in ſwallowing be very great, yet, while the patient breathes eaſy,, there is not ſo much danger. An external ſwelling is no unfavourable ſymptom; but, if it ſuddenly falls, and the diſeaſe affects the breaſt, the danger is very great. When a quinſey is the conſequence of ſome other diſeaſe, which has already weakened the patient, his ſituation is dangerous. A frothing at the mouth, and a ſwelled tongue, a pale ghaſtly countenance, and coldneſs of the extremities, are fatal ſymptoms.

CURE.---It is peculiarly neceſſary that the neck be kept warm; for which purpoſe ſeveral folds of ſoft flannel may be wrapt round it. The jelly of black currants is a medicine very much in eſteem for complaints of the throat; and indeed it is of ſome uſe. It ſhould be almoſt conſtantly kept in the mouth, and ſwallowed down leiſurely. It may likewiſe be mixed in the patient's drink, or taken any other way. When it cannot be obtained, the jelly of red currants, or of mulberries, may be uſed in its ſtead. Gargles are alſo very beneficial: they may be made of ſage-tea, with a little vinegar and honey; and may be uſed three or four times a-day; and, if the patient be troubled with tough viſcid phlegm, the gargle may be rendered more ſharp and cleanſing by adding to it a tea-ſpoonful of ſpirit of ſal ammoniac. There is no diſeaſe wherein the benefit of bathing the feet and legs in lukewarm water is more apparent: that practice ought therefore never to be neglected. If the inflammation be violent, it will be proper, as ſoon as the ſymptoms appear, to bleed in the arm, or rather in the jugular vein, and to repeat the operation if circumſtances require. The body ſhould likewiſe be kept gently open. This may be done by giving the patient for his ordinary drink a decoction of figs and tamarinds, or ſmall doſes of rhubarb and nitre. Good effects are often produced from a bit of ſal prunel, or purified nitre, held in the mouth, and ſwallowed down as it melts. This promotes the diſcharge of ſaliva, by which means it anſwers the end of a gargle, while at the ſame time it abates the fever, by promoting the diſcharge of urine, &c. Bliſtering upon the neck or behind the ears, in violent inflammations of the throat, is very beneficial; and in bad caſes it will be neceſſary to lay a bliſtering-plaſter quite acroſs the throat, ſo as to reach from ear to ear. After the plaſters are taken off, the parts ought to be kept running by the application of iſſue ointment, till the inflammation is gone; otherwiſe, upon their drying up, the patient will be in danger of a relapſe. When a difficulty of ſwallowing is not attended with an acute pain or inflammation, it only requires that the part be kept warm, and the throat frequently gargled with ſomething that may gently ſtimulate the glands, as a decoction of figs with vinegar and honey; to which may be added a little muſtard, or a ſmall quantity of ſpirits. But this gargle is never to be uſed where there are ſigns of an inflammation. Thoſe who are ſubject to inflammations of the throat, in order to avoid that diſeaſe, ought to live temperate. Such as do not chuſe to obſerve this rule muſt have frequent recourſe to purging and other evacuations, to diſcharge the ſuperfluous humours. They ought likewiſe to beware of catching cold, and ſhould abſtain from aliment and medicines of an aſtringent or ſtimulating nature.

## Of the MALIGNANT or PUTRID ULCEROUS SORE THROAT.

THIS is evidently a contagious diſtemper, and is generally communicated by infection. Whole families, and even entire villages, often receive the infection from one perſon. Whatever tends to produce putrid or malignant fevers may likewiſe occaſion the putrid ulcerous ſore throat, as unwholeſome air, damaged proviſions, neglect of cleanlineſs, &c. It begins with alternate fits of ſhivering and heat. The pulſe is quick, but low and unequal, and generally continues ſo through the whole courſe of the diſeaſe. The tongue is white and generally moiſt, which diſtinguiſhes this from an inflammatory diſeaſe. Upon looking into the throat, it appears ſwelled and of a florid red colour. Pale or aſh coloured ſpots, however, are here and there interſperſed, and ſometimes one broad patch or ſpot, of an irregular figure, and pale white colour, ſurrounded with florid red, only appears. Theſe whitiſh ſpots or ſloughs cover ſo many ulcers. The putrid ulcerous ſore throat may be diſtinguiſhed from the inflammatory by the vomiting and looſeneſs with which it is generally uſhered in; the foul ulcers in the throat covered with a white or livid coat; and by the exceſſive weakneſs of the patient; with other ſymptoms of a putrid fever.

CURE.---The treatment in this kind of ſore throat is entirely different from that which is proper in the inflammatory. All evacuations, as bleeding, purging, &c. which weaken the patient, muſt be avoided. Cooling medicines, as nitre and cream of tartar, are likewiſe hurtful. Strengthening cordials alone can be uſed with ſafety; and theſe ought never to be neglected. If, at the beginning, there is a great nauſea, or inclination to vomit, the patient muſt drink an infuſion of green tea, camomile flowers, or *carduus benedictus*, in order to cleanſe the ſtomach. If theſe are not ſufficient, he may take a few grains of the powder of ipecacuanha, or any other gentle vomit. If the diſeaſe is mild, the throat may be gargled with an infuſion of ſage and roſe leaves, to a gill of which may be added a ſpoonful or two of honey, and as much vinegar as will make it agreeably acid; but, when the ſymptoms are urgent, it will be of great benefit if the patient frequently receives into his mouth, through an inverted funnel, the ſteams of warm vinegar, myrrh, and honey. But, when the putrid ſymptoms run high, and the diſeaſe is attended with danger, the only medicine that can be depended upon is the Peruvian bark. It may be taken in ſubſtance, if the patient's ſtomach will bear it. If not, an ounce of bark groſsly powdered, with two drachms of Virginian ſnake-root, may be boiled in a pint and a half of water to half a pint; to which a teaſpoon-full of the elixir of vitriol may be added, and an ordinary teacup-full of it taken every three or four hours. Bliſters are very beneficial in this diſeaſe, eſpecially when the patient's pulſe and ſpirits are low. They may be applied to the throat, behind the ears, or upon the back part of the neck. If a diſcharge of blood from the noſe happens, the ſteams of warm vinegar may be received up the noſtrils frequently; and the drink muſt be ſharpened with ſpirits of vitriol, or tincture of roſes. In caſe of a ſtranguary, the belly muſt be fomented with warm water, and emollient clyſters given three or four times a day. After the violence of the diſeaſe is over, the body ſhould ſtill be kept open with mild purgatives; as manna, ſenna, rhubarb, or the like.

Of

## OF COLDS AND COUGHS.

COLDS are the effect of an obſtructed perſpiration; and almoſt every cold is a kind of fever, which only differs in degree from ſome of thoſe that have already been treated of. No age, ſex, or conſtitution, is exempted from this diſeaſe; neither is it in the power of any medicine or regimen to prevent it. The inhabitants of every climate are liable to catch cold, nor can even the greateſt circumſpection defend them at all times from its attacks. Indeed, if the human body could be kept conſtantly in an uniform degree of warmth, ſuch a thing as catching cold would be impoſſible: but, as that cannot be effected by any means, the perſpiraton muſt be liable to many changes. When oppreſſion of the breaſt, a ſtuffing of the noſe, unuſual wearineſs, pain of the head, &c. give ground to believe that the perſpiration is obſtructed, or, in other words, that the perſon has caught cold, he ought immediately to leſſen his diet, at leaſt the uſual quantity of his ſolid food, and to abſtain from all ſtrong liquors. Would people ſacrifice a little time to eaſe and warmth, and practiſe a moderate degree of abſtinence when the firſt ſymptoms of a cold appear, we have reaſon to believe, that moſt of the bad effects which flow from an obſtructed perſpiration might be prevented. But, after the diſeaſe has gathered ſtrength by delay, all attempts to remove it often prove vain. A pleuriſy, a peripneumony, or a fatal conſumption of the lungs, are often the effects of common colds; notwithſtanding people affect to treat them with ſo much indifference and neglect, merely becauſe they are only colds. Hence it is, that colds deſtroy ſuch numbers of mankind. Like an enemy deſpiſed, they gather ſtrength from delay, till, at length, they become invincible. It is certain, however, that colds may be too much indulged. When a perſon, for every ſlight cold, ſhuts himſelf up in a warm room, ſwallows medicine, and drinks great quantities of warm liquor, it may occaſion ſuch a general relaxation of the ſolids, as will not be eaſily removed. Bathing the feet in warm water, lying in bed, and drinking warm water-gruel, or other weak liquors, will ſooner take off a ſpaſm, and reſtore the perſpiration, than all the hot ſudorific medicines in the world. This is all that is neceſſary for removing a common cold; and, if this courſe be taken at the beginning, it will ſeldom fail. When the ſymptoms do not yield to abſtinence, warmth, and diluting liquors, there is reaſon to fear the approach of ſome other diſeaſe, as an inflammation of the breaſt, an ardent fever, or the like, and the patient ſhould then be treated accordingly. The chief ſecret of preventing cold lies in avoiding, as far as poſſible, all extremes either of heat or cold, and in taking care, when the body is heated, to let it cool gradually.

## OF A COMMON COUGH.

A COUGH is generally the effect of a cold, which has either been improperly treated or entirely neglected. When it proves obſtinate, there is always reaſon to fear the conſequences, as this ſhews a weak ſtate of the lungs, and is often the forerunner of a conſumption. If the cough be violent, and the patient young and ſtrong, with a hard quick pulſe, bleeding will be proper; but, in weak and relaxed habits, bleeding rather prolongs the diſeaſe. When the patient ſpits freely, bleeding is unneceſſary, and ſometimes hurtful, as it tends to leſſen that diſcharge. When a cough is occaſioned by acrid humours tickling the throat and *fauces*, the patient ſhould keep ſome ſoft pectoral lozenges almoſt conſtantly in his mouth; as the Pontefract-liquorice cakes, barley-ſugar, the common balſamic lozenges, Spaniſh juice, &c. Theſe blunt the acrimony of the humours, and, by taking off their ſtimulating quality, help to appeaſe the cough. In obſtinate coughs, proceeding from a flux of humours upon the lungs, it will often be neceſſary, beſides expectorating medicines, to have recourſe to iſſues, ſetons, or ſome other drain. In this caſe I have often obſerved the moſt happy effects from a Burgundy-pitch plaſter applied between the ſhoulders. About the bulk of a nutmeg of Burgundy-pitch may be ſpread thin upon a piece of ſoft leather, about the ſize of the hand, and laid between the ſhoulder-blades. It may be taken off and wiped every three or four days, and ought to be renewed once a fortnight or three weeks. This is indeed, a cheap and ſimple medicine, and conſequently apt to be deſpiſed; but we will venture to affirm, that the whole *materia medica* does not afford an application more efficacious in almoſt every kind of cough. It has not, indeed, always an immediate effect; but, if kept on for ſome time, it will ſucceed where moſt other medicines fail. But coughs proceed from many other cauſes beſides defluxions upon the lungs. In theſe caſes the cure is not to be attempted by pectoral medicines. Thus, in a cough proceeding from a foulneſs and debility of the ſtomach, ſyrups, oil, mucilages, and all kinds of balſamic medicines, do hurt. The *ſtomach cough* may be known from one that is owing to a fault in the lungs by this, that in the latter the patient coughs whenever he inſpires, or draws in his breath fully; but in the former that does not happen.

CURE.---The cure of this cough depends chiefly upon cleanſing and ſtrengthening the ſtomach; for which purpoſe gentle vomits and bitter purgatives are moſt proper. Thus, after a vomit or two, the ſacred tincture, as it is called, may be taken for a conſiderable time in the doſe of one or two tableſpoon-fulls twice a day, or as often as it is found neceſſary, to keep the body gently open. People may make this tincture themſelves, by infuſing an ounce of *hiera picra* in an Engliſh pint of white-wine, letting it ſtand a few days, and then ſtraining it. In coughs which proceed from a debility of the ſtomach, the Peruvian bark is likewiſe of conſiderable ſervice. It may either be chewed, taken in powder, or made into a tincture along with other ſtomachic bitters. A *nervous cough* can only be removed by change of air and proper exerciſe. Immerſing the feet and hands in warm water will often appeaſe the violence of a nervous cough. When a cough is only the ſymptom of ſome other malady, it is in vain to attempt to remove it without firſt curing the diſeaſe from which it proceeds. Thus, when a cough is occaſioned by *teething*, keeping the body open, ſcarifying the gums, or whatever facilitates the cutting of the teeth, likewiſe appeaſes the cough. In like manner, when *worms* occaſion a cough, ſuch medicines as remove theſe vermin will generally cure the cough; as bitter purgatives, oily clyſters, and ſuch-like. Women, during the laſt months of pregnancy, are often greatly afflicted with a cough, which is generally relieved by bleeding and keeping the body open. They ought to avoid all flatulent food, and to wear a looſe eaſy dreſs.

## OF THE WHOOPING OR CHIN COUGH.

THIS cough ſeldom affects adults, but proves often fatal to children. Whatever hurts the digeſtion, obſtructs the perſpiration, or relaxes the ſolids, diſpoſes to this diſeaſe: conſequently its cure muſt depend upon cleanſing and ſtrengthening the ſtomach, bracing the ſolids, and, at the ſame time, promoting perſpiration and the different ſecretions.

CURE.---One of the moſt effectual remedies in the chin-cough is change of air. This often removes the malady, even when the change ſeems to be from a purer to a leſs wholeſome air. This may in ſome meaſure depend on the patient's being removed from the place where the infection prevails. Moſt of the diſeaſes of children are infectious; nor is it at all uncommon to find the chin-cough prevailing in one town or village, when another, at a very ſmall diſtance, is quite free from it. But, whatever be the cauſe, we are ſure of the fact. No time ought therefore to be loſt in removing the patient to ſome diſtance from the place where he caught the diſeaſe, and, if poſſible, into a more pure and warm air. When the diſeaſe proves violent, and the patient is in danger of being ſuffocated by the cough, he ought to be bled, eſpecially if there be a fever with a hard full pulſe. But as the chief intention of bleeding is to prevent an inflammation of the lungs, and to render it more ſafe to give vomits, it will ſeldom be neceſſary to repeat the operation; yet, if there be ſymptoms of an inflammation of the lungs, a ſecond, or even a third, bleeding may be requiſite. Vomits not only cleanſe the ſtomach, which, in this diſeaſe is generally loaded with viſcid phlegm, but they likewiſe promote the perſpiration and other ſecretions; and ought therefore to be repeated according to the obſtinacy of the diſeaſe. They ſhould not be ſtrong; gentle vomits frequently repeated are leſs dangerous, and more beneficial, than ſtrong ones. Many people believe that oily, pectoral, and balſamic, medicines poſſeſs wonderful virtues for the cure of the chin-cough, and accordingly exhibit them plentifully to patients of every age and conſtitution, without conſidering that every thing of this nature muſt load the ſtomach, hurt the digeſtion, and of courſe aggravate the diſorder. The *millepedes*, or woodlice, are greatly recommended for the cure of a chin-cough. Thoſe, who chuſe to make uſe of theſe inſects, may infuſe two ounces of them bruiſed in an Engliſh pint of ſmall white-wine for one night. Afterwards the liquor may be ſtrained through a cloth, and a table ſpoonful of it given to the patient three or four times a-day. Opiates are ſometimes neceſſary to allay the violence of the cough. For this purpoſe a little of the ſyrup of poppies, or five, ſix, or ſeven, drops of laudanum, according to the age of the patient, may be taken in a cup of hyſſop or penny-royal tea, and repeated occaſionally. The garlic ointment is a well-known remedy in North-Britain for the chin-cough. It is made by beating in a mortar garlic with an equal quantity of hog's lard. With this the ſoles of the feet may be rubbed twice or thrice a day; but the beſt method is to ſpread it upon a rag, and apply it in the form of a plaſter. It ſhould be renewed every night and morning at leaſt, as the garlic ſoon loſes its virtue. This is an exceeding good medicine, both in the chin-cough and in moſt other coughs of an obſtinate nature. It ought not, however, to be uſed when the patient is very hot or feveriſh, leſt it ſhould increaſe theſe ſymptoms.

## INFLAMMATION OF THE STOMACH.

AN inflammation of the ſtomach may proceed from any of the cauſes which produce an inflammatory fever; as cold liquor drunk while the body is warm, obſtructed perſpiration, or the ſudden ſtriking in of any eruption. It is attended with a fixed pain and burning heat in the ſtomach; great reſtleſſneſs and anxiety; a ſmall, quick, and hard, pulſe; vomiting, or, at leaſt, a nauſea and ſickneſs; exceſſive thirſt; coldneſs of the extremities; difficulty of breathing; cold clammy ſweats; and ſometimes convulſions and fainting fits. The ſtomach is ſwelled, and often feels hard to the touch. One of the moſt certain ſigns of this diſeaſe is the ſenſe of pain, which the patient feels upon taking any kind of food or drink, eſpecially if it be either too hot or too cold.

CURE.---All acrimonious, heating, and irritating, food and drink are carefully to be avoided. The weakneſs of the patient may deceive the by-ſtanders, and induce them to give him wines, ſpirits, or other cordials; but theſe never fail to increaſe the diſeaſe, and often occaſion ſudden death. The inclination to vomit may likewiſe impoſe on the attendants, and make them think a vomit neceſſary; but that too is almoſt certain death. Bleeding is abſolutely neceſſary, and is almoſt the only thing that can be depended on. When the diſeaſe proves obſtinate, it will often be proper to repeat this operation ſeveral times, nor muſt the low ſtate of the pulſe deter us from doing ſo. The pulſe indeed generally riſes upon bleeding, and, as long as that is the caſe, the operation is ſafe. Frequent fomentations with lukewarm water, or a decoction of emollient vegetables, as recommended in the Herbal, are likewiſe beneficial. Flannel cloths dipped in theſe muſt be applied to the region of the ſtomach, and removed as they grow cool. In this, and all other inflammations of the bowels, an epiſpaſtic, or bliſtering-plaſter, applied over the part affected, is one of the beſt remedies known. The only internal medicines which can with ſafety be recommended are mild clyſters. Theſe may be made of warm water, or thin water-gruel; and, if the patient is coſtive, a little ſweet oil, honey, or manna, may be added. Clyſters anſwer the purpoſe of an internal fomentation, while they keep the body open, and at the ſame time nouriſh the patient, who is often in this diſeaſe unable to retain any food upon his ſtomach. For theſe reaſons they muſt not be neglected, as the patient's life may depend on them.

## INFLAMMATION OF THE INTESTINES.

THIS is one of the moſt painful and dangerous diſeaſes that mankind is liable to. It generally proceeds from the ſame cauſes as the inflammation of the ſtomach; to which may be added coſtiveneſs, worms, eating unripe fruits, or great quantities of nuts, drinking hard windy malt liquors, as ſtale bottled beer or ale, ſour wine, cyder, &c. The inflammation of the inteſtines is denominated *iliac paſſion*, *enteritis*, *&c.* according to the name of the parts affected. The treatment however is nearly the ſame, whatever part of the inteſtinal canal be the ſeat of the diſeaſe. The ſymptoms are nearly the ſame as in the foregoing diſeaſe; only the pain, if poſſible, is more acute, and is ſituated lower. The vomiting is likewiſe more violent, and ſometimes even the excrements, together with the clyſters and ſuppoſitories, are diſcharged by the mouth. While the pain ſhifts, and the vomiting only returns at certain intervals, and while the clyſters paſs downwards, there is ground to hope; but, when the clyſters and *fæces* are vomited, and the patient is exceeding weak, with a low fluttering pulſe, a pale countenance, and a diſagreeable or ſtinking breath, there is great reaſon to fear that the conſequences will prove fatal. Clammy ſweats, black fœtid ſtools, with a ſmall intermitting pulſe, and a total ceſſation of pain, are ſigns of a mortification already begun, and of approaching death.

CURE.---Bleeding, in this as well as in the inflammation of the ſtomach, is of the greateſt importance. It ſhould be performed as ſoon as the ſymptoms appear, and muſt be repeated according to the ſtrength of the patient and the violence of the diſeaſe. A bliſter is likewiſe to be applied immediately over the part where the moſt violent pain is. This not only relieves the pain of the bowels, but even clyſters and purgative medicines, which before had no effect, will operate when the bliſters begin to riſe. The patient's feet and legs ſhould frequently be bathed in warm water, and cloths dipped in it applied to his belly. Bladders filled with warm water may likewiſe be applied to the region of the navel, and warm bricks, or bottles filled with warm water, to the ſoles of the feet. If the diſeaſe does not yield to clyſters and fomentations, recourſe muſt be had to pretty ſtrong purgatives; but, as theſe, by irritating the bowels, often increaſe their contraction, and by that means fruſtrate their own intention, it will be neceſſary to join them with opiates, which, by allaying the pain, and relaxing the ſpaſmodic contractions of the guts, greatly aſſiſt the operation of purgatives in this caſe. What anſwers the purpoſe of opening the body very well, is a ſolution of the bitter purging ſalts. Two ounces of theſe may be diſſolved in an Engliſh pint of warm water, or thin gruel, and a teacup-full of it taken every half hour till it operates. At the ſame time fifteen, twenty, or twenty-five, drops of laudanum may be given in a glaſs of peppermint or ſimple cinnamon-water, to appeaſe the irritation, and prevent the vomiting, &c. But it often happens that no liquid whatever will ſtay on the ſtomach. In this caſe the patient muſt take purging pills. I have generally found the following anſwer very well: Take jalap in powder, and vitriolated tartar, of each half a drachm; opium one grain; Caſtile ſoap as much as will make the maſs fit for pills. Theſe muſt be taken at one doſe, and, if they do not operate in a few hours, the doſe may be repeated. If a ſtool cannot be procured by any of the above means, it will be neceſſary to immerſe the patient in warm water up to the breaſt. This often ſucceeds when other means have been tried in vain. The patient muſt continue in the water as long as he can eaſily bear it without fainting; and, if one immerſion has not the deſired effect, it may be repeated as ſoon as the patient's ſtrength and ſpirits are recruited. It is more ſafe for him to go frequently into the bath than to continue too long at a time; and it is often neceſſary to repeat it ſeveral times before it has the deſired effect. In deſperate caſes it is common to give quickſilver. This may be given to the quantity of ſeveral ounces, or even a pound, but ſhould not exceed that. When there is reaſon to ſuſpect a mortification of the guts, this medicine ought not to be tried. In that caſe it cannot cure the patient, and will only haſten his death. But, when the obſtruction is occaſioned by any cauſe that can be removed by force, quickſilver is not only a proper medicine, but the beſt that can be adminiſtered, as it is the fitteſt body we know for making its way through the inteſtinal canal.

## OF THE CHOLIC.

THE cholic has a great reſemblance to the two preceding diſeaſes, both in its ſymptoms and method of cure. It is generally attended with coſtiveneſs and acute pain of the bowels; and requires diluting diet, evacuations, fomentations, &c. Cholics are variouſly denominated, according to their cauſes, as the *flatulent*, the *bilious*, the *hyſteric*, the *nervous*, &c.

CURE.---When the diſeaſe proceeds from windy liquor, green fruit, ſour herbs, or the like, the beſt medicine on the firſt appearance of the ſymptoms is a dram of brandy, gin, or any good ſpirits. The patient ſhould likewiſe ſit with his feet upon a warm hearth-ſtone, or apply warm bricks to them; and warm cloths may be applied to his ſtomach and bowels. This is the only cholic wherein ardent ſpirits, ſpiceries, or any thing of a hot nature, may be ventured upon. Nor indeed are they to be uſed here unleſs at the very beginning, before any ſymptoms of inflammation appear. The *bilious* cholic is attended with very acute pains about the region of the navel. The patient complains of great thirſt, and is generally coſtive. He vomits a hot, bitter, yellow-coloured, bile, which, being diſcharged, ſeems to afford ſome relief, but is quickly followed by the ſame violent pain as before. As the diſtemper advances, the propenſity to vomit ſometimes increaſes ſo as to become almoſt continual, and the proper motion of the inteſtines is ſo far perverted, that there are all the ſymptoms of an impending iliac paſſion. If the patient be young and ſtrong, and the pulſe full and frequent, it will be proper to bleed, after which clyſters may be adminiſtered. Clear whey or gruel, ſharpened with the juice of lemon, or cream of tartar, muſt be drunk freely: it will be neceſſary likewiſe to foment the belly with cloths dipped in warm water; and, if this ſhould not ſucceed, the patient muſt be immerſed up to the breaſt in warm water. In the bilious cholic, the vomiting is often very difficult to reſtrain. When this happens, the patient may drink a decoction of toaſted bread, or an infuſion of garden-mint in boiling water. Such as are liable to frequent returns of the bilious cholic ſhould uſe fleſh ſparingly, and live chiefly upon a light vegetable diet. They ſhould likewiſe take frequently a doſe of cream of tartar with tamarinds, or any other cool acid purge. The *hyſteric* cholic bears a great reſemblance to the bilious. It is attended with acute pains about the region of the ſtomach, vomiting, &c. But what the patient vomits in this caſe is commonly of a greeniſh colour. There is a great ſinking of the ſpirits, with dejection of mind and difficulty of breathing, which are the characteriſtic ſymptoms of this diſorder. Sometimes it is accompanied with the jaundice; but this generally goes off of its own accord in a few days. In this cholic all evacuations, as bleeding, purging, vomiting, &c. do hurt. Every thing that weakens the patient, or ſinks the ſpirits, is to be avoided. If however the vomiting ſhould prove violent, lukewarm water, or ſmall poſſet, may be drunk to cleanſe the ſtomach. Afterwards the patient may take fifteen, twenty, or twenty-five, drops of liquid laudanum in a glaſs of cinnamon-water. This may be repeated every ten or twelve hours till the ſymptoms abate. The *nervous* cholic prevails among miners, ſmelters of lead, plumbers, the manufacturers of white lead, &c. It is very common in the cyder counties of England, and is ſuppoſed to be occaſioned by the leaden veſſels uſed in preparing that liquor. No diſeaſe of the bowels is attended with more excruciating pain than this. Nor is it ſoon at an end. I have known it continue eight or ten days with very little intermiſſion, the body all the while continuing bound in ſpite of medicine, yet at length yield, and the patient recover. It generally however leaves the patient weak, and often ends in a palſy. The general treatment of this diſeaſe is the ſame with that of the iliac paſſion, or inflammation of the bowels.

## INFLAMMATION OF THE KIDNEYS.

THIS diſeaſe may proceed from any of thoſe cauſes which produce an inflammatory fever. It may likewiſe be occaſioned by wounds or bruiſes of the kidneys; ſmall ſtones or gravel lodging within them; by hard riding or walking, eſpecially in hot weather; or whatever drives the blood too forcibly into the kidneys, may occaſion this malady.

CURE.---Every thing of a heating or ſtimulating nature is to be avoided. Emollient and thin liquors muſt be plentifully drunk; as clear whey, or balm-tea ſweetened with honey, decoctions of marſh-mallow roots, with barley and liquorice, &c. Bleeding is generally neceſſary, eſpecially at the beginning. Ten or twelve ounces may be let from the arm or foot; and, if the pain and inflammation continue, the operation may be repeated in twenty-four hours, eſpecially if the patient be of a full habit. Leeches may likewiſe be applied to the hæmorrhoidal veins, as diſcharge from theſe will greatly relieve the patient. Cloths dipped in warm water, or bladders filled with it, muſt be applied as near as poſſible to the part affected, and renewed as they grow cool. If the bladder be filled with a decoction of mallows and camomile flowers, to which a little ſaffron is added, and mixed with about a third part of new milk, it will be ſtill more beneficial. Emollient clyſters ought frequently to be adminiſtered; and, if theſe do not open the body, a little ſalt and honey or manna may be added to them. The ſame courſe is to be followed where gravel or a ſtone is lodged in the kidney; but, when the gravel or ſtone is ſeparated from the kidney, and lodges in the ureter, it will be proper, beſides the fomentations, to rub the ſmall of the back with ſweet oil, and to give gentle diuretics: as juniperniper-water ſweetened with the ſyrup of marſh-mallows; a teaſpoon-full of the ſweet ſpirits of nitre, with a few drops of laudanum, may now and then be put in a cup of the patient's drink. He ought likewiſe to take exerciſe on horſeback, or in a carriage, if he be able to bear it.

## INFLAMMATION OF THE BLADDER.

THE inflammation of the bladder proceeds, in a great meaſure, from the ſame cauſes as that of the kidneys. It is known by an acute pain towards the bottom of the belly, and difficulty of paſſing urine, with ſome degree of fever, a conſtant inclination to go to ſtool, and a perpetual deſire to make water. This diſeaſe muſt be treated on the ſame principles as the one immediately preceding. The patient ſhould abſtain from every thing that is of a hot, acrid, and ſtimulating, quality, and ſhould live entirely upon ſmall broths, gruels, or mild vegetables. But a ſtoppage of urine may proceed from other cauſes beſides an inflammation of the bladder; as a ſwelling of the hæmorrhoidal veins; hard *fæces* lodged in the *rectum*; a ſtone in the bladder; excreſcences in the urinary paſſages, a palſy of the bladder, hyſteric affections, &c. In all which caſes, mild and gentle applications are the ſafeſt; ſtrong diuretic medicines, or things of an irritating nature, generally increaſe the danger. I have known ſome perſons kill themſelves by introducing probes into the urinary paſſages, to remove, as they thought, ſomewhat that obſtructed the diſcharge of urine; and others bring on a violent inflammation of the bladder, by uſing ſtrong diuretics, as oil of turpentine, &c. for that purpoſe.

## INFLAMMATION OF THE LIVER.

THIS diſeaſe is known by a painful tenſion of the right ſide under the falſe ribs, attended with ſome degree of fever, a ſenſe of weight, or fulneſs of the part, difficulty of breathing, loathing of food, great thirſt, with a pale or yellowiſh colour of the ſkin and eyes. This diſeaſe, if properly treated, is ſeldom mortal. If it ends in a ſuppuration, and the matter cannot be diſcharged outwardly, the danger is then great. When the ſchirrhus of the liver enſues, the patient, if he obſerves a proper regimen, may nevertheleſs live a number of years; but, if he indulge in animal food and ſtrong liquors, or take medicines of an acrid or irritating nature, the ſchirrhus will be converted into a cancer, which muſt infallibly prove fatal.

CURE.---The ſame regimen is to be obſerved in this as in other inflammatory diſorders. All hot things are to be carefully avoided; and cool diluting liquors, as whey, barley-water, &c. drunk freely. The food muſt be light and thin, and the body, as well as the mind, kept eaſy and quiet. Bleeding is proper at the beginning; and it will often be neceſſary, even though the pulſe ſhould not feel hard, to repeat it. All violent purgatives are to be avoided; the body however muſt be kept gently open. A decoction of tamarinds, with a little honey or manna, will anſwer this purpoſe very well. The ſide affected muſt be fomented in the manner directed in the foregoing diſeaſes. Mild laxatives clyſters ſhould be frequently adminiſtered; and, if the pain ſhould notwithſtanding continue violent, a bliſtering-plaſter may be applied over the part affected. Medicines which promote the ſecretion of urine have a very good effect here. For this purpoſe, half a drachm of purified nitre, or a tea-ſpoonful of the ſweet ſpirits of nitre, may be taken in a cup of the patient's drink three or four times a-day. All inflammation of the viſcera muſt in general be treated upon the ſame principles as thoſe already mentioned. The chief rule, with reſpect to all of them, is to let blood, to avoid every thing that is ſtrong, or of a heating nature, to apply warm fomentations to the part affected, and to cauſe the patient to drink a ſufficient quantity of warm diluting liquors.

## OF THE CHOLERA MORBUS.

THE cholera morbus is a violent purging and vomiting, attended with gripes, ſickneſs, and a conſtant deſire to go to ſtool. It comes on ſuddenly, and is moſt common in autumn. There is hardly any diſeaſe that kills more quickly than this, when proper means are not uſed in due time for removing it. It is generally preceded by the heart-burn, ſour belchings, and flatulencies, with pain of the ſtomach and inteſtines. To theſe ſucceed exceſſive vomiting, and purging of green, yellow, or blackiſh, coloured bile, with a diſtention of the ſtomach, and violent griping pains. There is likewiſe a great thirſt, with a very quick unequal pulſe, and often a fixed acute pain about the region of the navel. As the diſeaſe advances, the pulſe often ſinks ſo low as to become quite imperceptible, the extremities grow cold, or cramped, and are often covered with a clammy ſweat, the urine is obſtructed, and there is a palpitation of the heart. Violent hiccup, fainting, and convulſions, are the ſigns of approaching death.

CURE.---At the beginning of this diſeaſe, the efforts of nature to expel the offending cauſe ſhould be aſſiſted, by promoting the purging and vomiting. For this purpoſe the patient muſt drink freely of diluting liquors; as whey, butter-milk, warm water, thin water gruel, ſmall poſſet, or, what is perhaps preferable to any of them, very weak chicken broth. This ſhould not only be drunk plentifully to promote the vomiting, but a clyſter of it given every hour in order to promote the purging. Warm negus, or ſtrong wine whey, will likewiſe be neceſſary to ſupport the patient's ſpirits, and promote perſpiration. His legs ſhould be bathed in warm water, and afterwards rubbed with flannel cloths, or wrapped in warm blankets, and warm bricks applied to the ſoles of his feet. Flannels wrung out of warm ſpirituous fomentations ſhould likewiſe be applied to the region of the ſtomach. When the violence of the diſeaſe is over, to prevent a relapſe, it will be neceſſary, for ſome time, to continue the uſe of ſmall doſes of laudanum. Ten or twelve drops may be taken in a glaſs of wine, at leaſt twice a-day, for eight or ten days. The patient's food ought to be nouriſhing, but taken in ſmall quantities, and he ſhould uſe moderate exerciſe. As the ſtomach and inteſtines are generally much weakened, an infuſion of the bark, or bitter herbs, in ſmall wine, ſharpened with the elixir of vitriol, may be drunk for ſome time.

## OF A DIARRHŒA, OR, LOOSENESS.

A LOOSENESS, in many caſes, is not to be conſidered as a diſeaſe, but rather as a ſalutary evacuation. It ought therefore never to be ſtopped unleſs when it continues too long, or evidently weakens the patient.

CURE.---A looſeneſs, occaſioned by the obſtruction of any cuſtomary evacuation, generally requires bleeding. If that does not ſucceed, other evacuations may be ſubſtituted in the room of thoſe which are obſtructed. At the ſame time, every method is to be taken to reſtore the uſual diſcharges, as not only the cure of the diſeaſe, but the patient's life, may depend on this. A diarrhœa, or looſeneſs, which proceeds from violent paſſions or affections of the mind, muſt be treated with the greateſt caution. Vomits in this caſe are highly improper. Nor are purges ſafe, unleſs they be very mild, and given in ſmall quantities. Opiates, and other antiſpaſmodic medicines, are more proper. Ten or twelve drops of liquid laudanum may be taken in a cup of valerian or penny-royal tea, every eight or ten hours, till the ſymptoms abate. Eaſe, cheerfulneſs, and tranquillity of mind, are here of the greateſt importance. When a looſeneſs proceeds from acrid or poiſonous ſubſtances taken into the ſtomach, the patient muſt drink large quantities of diluting liquors, with oil or fat broths, to promote vomiting or purging. Afterwards, if there be reaſon to ſuſpect that the bowels are inflamed, bleeding will be neceſſary. Small doſes of laudanum may likewiſe be taken to remove their irritation. From whatever cauſe a looſeneſs proceeds, when it is found neceſſary to check it, the diet ought to conſiſt of rice boiled with milk, and flavoured with cinnamon; rice-jelly; ſago, with red port; and the lighter ſorts of fleſh-meat roaſted. The drink may be thin water-gruel, rice-water, or weak broth made from lean veal, or with a ſheep's head, as being more gelatinous than mutton, beef, or chicken, broth.

## OF VOMITING.

VOMITING may proceed from various cauſes; as, exceſs in eating and drinking, foulneſs of the ſtomach, the acrimony of the aliments, or a tranſlation of the morbific matter of ulcers, of the gout, the eryſipelas, or other diſeaſes, to the ſtomach and bowels.

CURE.---When vomiting proceeds from a foul ſtomach or indigeſtion, it is not to be conſidered as a diſeaſe, but as the cure of a diſeaſe. It ought therefore to be promoted by drinking lukewarm water or thin gruel. If this does not put a ſtop to the vomiting, a doſe of ipecacuanha may be taken, and worked off with weak camomile-tea. If vomiting proceeds from weakneſs of the ſtomach, bitters will be of ſervice. Peruvian bark infuſed in wine or brandy, with as much rhubarb as will keep the body gently open, is an excellent medicine in this caſe. The elixir of vitriol is alſo a good medicine; it may be taken in the doſe of fifteen or twenty drops, twice or thrice a-day, in a glaſs of wine or water. Habitual vomitings are ſometimes alleviated by making oyſters a principal part of the diet. A vomiting, which proceeds from acidities in the ſtomach, is relieved by alkaline purges. The beſt medicine of this kind is the magneſia alba, a tea-ſpoonful of which may be taken in a diſh of tea or a little milk, three or four times a-day, or oftener if neceſſary, to keep the body open. I have always found the ſaline draughts, taken in the act of efferveſcence, of ſingular uſe in ſtopping a vomiting, from whatever cauſe it proceeded. Theſe may be prepared by diſſolving a drachm of the ſalt of tartar in an ounce and half of freſh lemon juice, and adding to it an ounce of peppermint-water, the ſame quantity of ſimple cinnamon-water, and a little white ſugar. This draught muſt be ſwallowed before the efferveſcence is quite over, and may be repeated every two hours, or oftener, if the vomiting be violent.

## OF THE DIABETES.

IN a diabetes, the urine generally exceeds in quantity all the liquid food which the patient takes. It is thin and pale, of a ſweetiſh taſte, and an agreeable ſmell. The patient has a continual thirſt, with ſome degree of fever; his mouth is dry, and he ſpits frequently a frothy ſpittle. The ſtrength fails, the appetite decays, and the fleſh waſtes away till the patient is reduced to ſkin and bone. There is a heat of the bowels; and frequently the loins, teſticles, and feet, are ſwelled.

CURE.---This diſeaſe may generally be cured at the beginning; but, after it has continued long, the cure becomes very difficult. Every thing that ſtimulates the urinary paſſages, or tends to relax the habit, muſt be avoided. For this reaſon the patient ſhould live chiefly on ſolid food. His thirſt may be quenched with acids; as ſorrel, juice of lemon, or vinegar. The mucilaginous vegetables, as rice, ſago, and ſalop, with milk, are the moſt proper food. Of animal ſubſtances, ſhell-fiſh are to be preferred; as oyſters, crabs, &c. The drink may be Briſtol-water, (a conſtant courſe of which has done wonders in this diſorder, and is reckoned a ſpecific;)

when that cannot be obtained, lime-water, in which a due proportion of oak-bark has been macerated, may be uſed. The patient ought daily to take exerciſe, but it ſhould be ſo gentle as not to fatigue him. He ſhould lie upon a hard bed or mattraſs. Nothing hurts the kidneys more than lying too ſoft. Gentle purges, if the patient be not too much weakened by the diſeaſe, have a good effect. They may conſiſt of rhubarb, with cardamum ſeed, or any other ſpiceries, infuſed in wine, and may be taken in ſuch quantity as to keep the body gently open. The patient muſt next have recourſe to aſtringents and corroborants. Half a drachm of powder, made of equal parts of alum and the inſpiſſated juice commonly called *Terra Japonica*, may be taken four times a-day, or oftener, if the ſtomach will bear it; otherwiſe, Peruvian-bark ſteeped in red wine. Opiates are of ſervice in this diſeaſe, even though the patient reſts well. They take off ſpaſm and irritation, and at the ſame time leſſen the force of the circulation. Ten or twelve drops of liquid laudanum may be taken in a cup of the patient's drink three or four times a-day.

## OF A SUPPRESSION OF URINE.

A SUPPRESSION of urine may proceed from various cauſes; as an inflammation of the kidneys or bladder, ſmall ſtones or gravel lodging in the urinary paſſages, hard *fæces* lying in the *rectum*, pregnancy, a ſpaſm or contraction of the neck of the bladder, clotted blood in the bladder itſelf, a ſwelling of the hæmorrhoidal veins, &c.

CURE.---We would chiefly recommend, in all obſtructions of urine, fomentatations and evacuants. Bleeding, as far as the patient's ſtrength will permit, is neceſſary, eſpecially where there are ſymptoms of topical inflammation. Bleeding in this caſe not only abates the fever, by leſſening the force of the circulation, but, by relaxing the ſolids, it takes off the ſpaſm or ſtricture upon the veſſels which occaſioned the obſtruction. After bleeding, fomentations muſt be uſed. Theſe may either conſiſt of warm water alone, or of decoctions of mild vegetables; as mallows, camomile flowers, and ſuch other herbs as are recommended in the Herbal. Cloths dipped in theſe may either be applied to the part affected, or a large bladder filled with the decoction may be kept continually upon it. Perſons ſubject to a ſuppreſſion of urine ought to live very temperate. Their diet ſhould be light, and their liquor diluting. They ſhould avoid all acids and auſtere wines; ſhould take ſufficient exerciſe, lie hard, and avoid ſtudy and ſedentary occupations.

## OF THE GRAVEL AND STONE.

THE ſtone and gravel may be occaſioned by high living; the uſe of ſtrong aſtringent wines; a ſedentary life; lying too hot, ſoft, or too much on the back; the conſtant uſe of water impregnated with earthy or ſtony particles; aliments of an aſtringent or windy nature, &c. It may likewiſe proceed from an hereditary diſpoſition. Perſons in the decline of life, and thoſe who have been much afflicted with the gout or rheumatiſm, are moſt liable to it.

CURE.---Perſons afflicted with the gravel or ſtone ſhould avoid aliments of a windy or heating nature, as ſalt meats, ſour fruits, &c. Their diet ought chiefly to conſiſt of ſuch things as tend to promote the ſecretion of urine, and to keep the body open. Artichokes, aſparagus, ſpinnage, lettuce, parſley, ſuccory, purſlane, turnips, potatoes, carrots, and radiſhes, may be ſafely eaten. Onions, leeks, and cellery, are, in this caſe, reckoned medicinal. The moſt proper drinks are whey, butter-milk, milk and water, barley-water; decoctions or infuſions of the roots of marſh-mallows, parſley, liquorice, or of other mild mucilaginous vegetables, as linſeed, lime-tree buds or leaves, &c. If the patient has been accuſtomed to generous liquors, he may drink ſmall gin-punch without acid. In what is called a fit of the gravel, which is commonly occaſioned by a ſtone ſticking in the ureter or ſome part of the urinary paſſages, the patient muſt be bled, warm fomentations ſhould likewiſe be applied to the part affected, emollient clyſters adminiſtered, and diluting mucilaginous liquors drunk, &c. The treatment in this caſe muſt be the ſame as pointed out for an inflammation of the kidneys and bladder, &c. Patients who are ſubject to frequent fits of gravel in the kidneys, but have no ſtone in the bladder, are adviſed to drink every morning, two or three hours before breakfaſt, an Engliſh pint of oyſter or cockle ſhell lime-water; for, though this quantity might be too ſmall to have any ſenſible effect in diſſolving a ſtone in the bladder, yet it may very probably prevent its growth. When a ſtone is formed in the bladder, Alicant ſoap, and oyſter or cockle ſhell lime-water, may be taken in the following manner: The patient muſt ſwallow every day, in any form that is leaſt diſagreeable, an ounce of the internal part of Alicant ſoap, and drink three or four Engliſh pints of oyſter or cockle ſhell lime-water. The ſoap is to be divided into three doſes; the largeſt to be taken faſting in the morning early; the ſecond at noon; and the third at ſeven in the evening; drinking with each doſe a large draught of the lime-water; the remainder of which he may take any time betwixt dinner and ſupper, inſtead of other liquors. The cauſtic alkali, or ſoap-lees, is the medicine chiefly in vogue at preſent for the ſtone. It may be prepared by mixing two parts of quick-lime with one of pot-aſhes, and ſuffering them to ſtand till the lixivium be formed, which muſt be carefully filtrated before it be uſed. If the ſolution does not happen readily, a ſmall quantity of water may be added to the mixture. The patient muſt begin with ſmall doſes of the lees, as thirty or forty drops, and increaſe by degrees, as far as the ſtomach will bear it.

## Of INVOLUNTARY DISCHARGES of BLOOD.

INVOLUNTARY diſcharges of blood are ſo far from being always dangerous, that they prove often ſalutary. When ſuch diſcharges are critical, which is frequently the caſe in fevers, they ought not to be ſtopped. Nor indeed is it proper at any time to ſtop them, unleſs they be ſo great as to endanger the patient's life. Moſt people, afraid of the ſmalleſt diſcharge of blood from any part of the body, fly immediately to the uſe of ſtyptic and aſtringent medicines, by which means an inflammation of the brain, or ſome other fatal diſeaſe, is occaſioned, which, had the diſcharge been allowed to go on, might have been prevented. Periodical diſcharges of blood, from whatever part of the body they proceed, muſt not be ſtopped. They are always the efforts of nature to relieve herſelf; and fatal diſeaſes have often been the conſequence of obſtructing them. It may indeed ſometimes be neceſſary to check the violence of ſuch diſcharges; but even this requires the greateſt caution. In the early period of life, bleeding at the noſe is very common. Thoſe who are farther advanced in years are more liable to *hæmoptoe*, or diſcharge of blood from the lungs. After the middle period of life, hæmorrhoidal fluxes are moſt common; and, in the decline of life, diſcharges of blood from the urinary paſſages. Bleeding at the noſe, to perſons who abound with blood, is very ſalutary. It often cures a vertigo, the head-ach, a phrenzy, and even an epilepſy. In fevers, where there is a great determination of blood towards the head, it is of the utmoſt ſervice. It is likewiſe beneficial in inflammations of the liver and ſpleen, and often in the gout and rheumatiſm. In all diſeaſes where bleeding is neceſſary, a ſpontaneous diſcharge of blood from the noſe is of much more ſervice than the ſame quantity let with a lancet. Whenever bleeding at the noſe relieves any bad ſymptom, and does not proceed ſo far as to endanger the patient's life, it ought not be ſtopped. But, when it returns frequently, or continues till the pulſe becomes low, the extremities begin to grow cold, the lips pale, or the patient complains of being ſick or faint, it muſt immediately be ſtopped.

CURE.---Let the patient be ſet nearly upright, with his head reclining a little, and his legs immerſed in water about the warmth of new milk. His hands ought likewiſe to be put in luke-warm water, and his garters may be tied a little tighter than uſual. Ligatures may be applied to the arms, about the place where they are uſually made for bleeding, and with nearly the ſame degree of tightneſs. Theſe muſt be gradually ſlackened as the blood begins to ſtop, and removed entirely as ſoon as it gives over. Sometimes dry lint put up the noſtrils will ſtop the bleeding. When this does not ſucceed, doſſils of lint dipped in ſtrong ſpirits of wine may be put up the noſtrils; or, if that cannot be had, they may be dipped in brandy.

If the genitals be immerſed for ſome time in cold water, it will generally ſtop a bleeding at the noſe. I have ſeldom known this fail.

## OF THE BLEEDING AND BLIND PILES.

A DISCHARGE of blood from the hæmorrhoidal veſſels is called the *bleeding piles*. When the veſſels only ſwell, and diſcharge no blood, but are exceeding painful, the diſeaſe is called the *blind piles*. This diſcharge, however, is not always to be treated as a diſeaſe. It is even more ſalutary than bleeding at the noſe, and often prevents or carries off diſeaſes. It is peculiarly beneficial in the gout, rheumatiſm, aſthma, and hypochondriacal complaints, and often proves critical in cholics and inflammatory fevers.

CURE.---In the management of the patient, regard muſt be had to his habit of body, his age, ſtrength, and manner of living. A diſcharge, which might be exceſſive and prove hurtful to one, may be very moderate, and even ſalutary, to another. That only is to be eſteemed dangerous which continues too long, and is in ſuch quantity as to waſte the patient's ſtrength, hurt the digeſtion, nutrition, and other functions neceſſary to life. The Peruvian bark is proper in this caſe, both as a ſtrengthener and aſtringent. Half a drachm of it may be taken in a glaſs of red wine, ſharpened with a few drops of the elixir of vitriol, three or four times a day. The bleeding piles are ſometimes periodical, and return regularly once a month, or once in three weeks. In this caſe they are always to be conſidered as a ſalutary diſcharge, and by no means to be ſtopped. In the *blind piles*, bleeding is generally of uſe. The diet muſt be light and thin, and the drink cool and diluting. It is likewiſe neceſſary that the body be kept gently open. When the piles are exceeding painful and ſwelled, but diſcharge nothing, the patient muſt ſit over the ſteam of warm water. He may likewiſe apply a linen cloth dipped in warm ſpirits of wine to the part, or poultices made of bread and milk, or of leeks fried with butter. If theſe do not produce a diſcharge, and the piles appear large, leeches muſt be applied as near them as poſſible, or, if they will fix upon the piles themſelves, ſo much the better. When leeches will not fix, the piles may be opened with a lancet. The operation is very eaſy, and is attended with no danger. When the pain is very great, a liniment made of two ounces of emollient ointment, and half an ounce of liquid laudanum, beat up with the yolk of an egg, may be applied.

## SPITTING OF BLOOD.

PERSONS of a ſlender make and a lax fibre, who have long necks and ſtrait breaſts, are moſt liable to this diſeaſe. It is moſt common in the ſpring, and generally attacks people before they arrive at the prime or middle period of life. It is a common obſervation, that thoſe who have been ſubject to bleeding at the noſe when young are afterwards moſt liable to this complaint. It is often occaſioned by exceſſive drinking, running, wreſtling, ſinging, or ſpeaking aloud. Such as have weak lungs ought to avoid all violent exertions of that organ, as they value life. They ſhould likewiſe guard againſt violent paſſions, exceſſive drinking, and every thing that occaſions a rapid circulation of the blood. It is often the effect of a long and violent cough; in which caſe it is generally the forerunner of a conſumption. Spitting of blood is not always to be conſidered as a primary diſeaſe. It is often only a ſymptom, and in ſome diſeaſes not an unfavourable one. This is the caſe in pleuriſies, peripneumonies, and ſundry other fevers. In a dropſy, ſcurvy, or conſumption, it is a bad ſymptom, and ſhews that the lungs are ulcerated.

CURE.---This, like the other involuntary diſcharges of blood, ought not to be ſuddenly ſtopped by aſtringent medicines. It may however proceed ſo far as to weaken the patient, and even endanger his life, in which caſe proper means muſt be uſed for reſtraining it. The body ſhould be kept gently open by laxative diet, as roaſted apples, ſtewed prunes, and ſuch like. If theſe ſhould not have the deſired effect, a tea-ſpoonful of the lenitive electuary may be taken twice or thrice a-day, as is found neceſſary. If the bleeding proves violent, ligatures may be applied to the extremities, as directed for a bleeding at the noſe. If the patient be hot or feveriſh, bleeding and ſmall doſes of nitre will be of uſe; a ſcruple or half a drachm of nitre may be taken in a cup of his ordinary drink twice or thrice a-day. If ſtronger aſtringents be neceſſary, fifteen or twenty drops of the acid elixir of vitriol may be given in a glaſs of water three or four times a-day.

## VOMITING OF BLOOD.

THIS diſeaſe often proceeds from an obſtruction of the menſes in women, and ſometimes from the ſtopping of the hæmorrhoidal flux in men. It may be occaſioned by any thing that greatly ſtimulates or wounds the ſtomach, as ſtrong vomits or purges, acrid poiſons, ſharp or hard ſubſtances taken into the ſtomach, &c. It is often the effect of obſtructions in the liver, the ſpleen, or ſome of the other viſcera. It may likewiſe proceed from external violence, as blows or bruiſes, or from any of the cauſes which produce inflammation. In hyſteric women, vomiting of blood is very common, but by no means a dangerous ſymptom.

CURE.---A great part of the danger in this diſeaſe ariſes from the extravaſated blood lodged in the bowels, and becoming putrid, by which means a dyſentery or putrid fever may be occaſioned. The beſt way of preventing this, is to keep the body gently open, by frequently exhibiting emollient clyſters. After the diſcharge is over, as the patient is generally troubled with gripes, occaſioned by the acrimony of the blood lodged in the inteſtines, gentle purges will be neceſſary.

## OF BLOODY URINE.

THIS diſcharge is more or leſs dangerous according to the different circumſtances which attend it. When pure blood is voided ſuddenly, without interruption and without pain, it proceeds from the kidneys; but, if the blood be in ſmall quantity, of a dark colour, and emitted with heat and pain about the bottom of the belly, it proceeds from the bladder. Bloody urine is always attended with ſome degree of danger; but it is peculiarly ſo when mixed with purulent matter, as this ſhews an ulcer ſomewhere in the urinary paſſages.

CURE.---When there is reaſon to ſuſpect an ulcer in the kidneys or bladder, the patient's diet muſt be cool, and his drink of a ſoft, healing, balſamic, quality, as decoctions of marſh-mallow roots with liquorice, ſolutions of gum-arabic, &c. Three ounces of marſh-mallow roots, and half an ounce of liquorice, may be boiled in two Engliſh quarts of water to one; two ounces of gum-arabic, and half an ounce of purified nitre, may be diſſolved in the ſtrained liquor, and a teacup-full of it taken four or five times a-day. The early uſe of aſtringents in this diſeaſe has often bad conſequences. When the flux is ſtopped too ſoon, the grumous blood, by being confined in the veſſels, may produce inflammation, abceſs, and ulcers. If however the caſe be urgent, or the patient ſeems to ſuffer from the loſs of blood, gentle aſtringents may be neceſſary. In this caſe the patient may take three or four ounces of lime-water, with half an ounce of the tincture of Peruvian bark, three times a-day.

## OF THE DYSENTERY, OR BLOODY FLUX.

THIS diſeaſe is known by the flux of the belly, attended with violent pain of the bowels, a conſtant inclination to go to ſtool, and generally more or leſs blood in the ſtools. It begins, like other fevers, with chilneſs, loſs of ſtrength, a quick pulſe, great thirſt, and an inclination to vomit. The ſtools are at firſt greaſy or frothy; afterwards they are ſtreaked with blood; and, at laſt, have frequently the appearance of pure blood, mixed with ſmall filaments, reſembling bits of ſkin.

CURE.---Nothing is of more importance in this diſeaſe than cleanlineſs. It contributes greatly to the recovery of the patient, and no leſs to the ſafety of ſuch as attend him. Every thing about the patient ſhould be frequently changed. The excrements ſhould never be ſuffered to continue in his chamber, but be removed immediately, and buried under ground. A conſtant ſtream of freſh air ſhould be admitted into the chamber; and it ought frequently to be ſprinkled with vinegar, juice of lemon, or ſome other ſtrong acid. At the beginning of this diſeaſe it is always neceſſary to cleanſe the firſt paſſages; for this purpoſe a vomit of ipecacuanha muſt be given, and wrought off with weak camomile-tea. Strong vomits are ſeldom neceſſary here; a ſcruple, or at moſt half a drachm, of ipecacuanha, is generally ſufficient for an adult, and ſometimes a very few grains will ſuffice. The day after the vomit, half a drachm, or two ſcruples, of rhubarb, muſt be taken; or, what will anſwer the purpoſe rather better, an ounce or an ounce and a half of Epſom ſalts; this doſe may be repeated every other day for two or three times. Afterwards ſmall doſes of ipecacuanha may be taken for ſome time; two or three grains of the powder may be mixed in a table-ſpoonful of the ſyrup of poppies, and taken three times a-day. Theſe evacuations will often be ſufficient to effect a cure. Should it happen otherwiſe, the following aſtringent medicines may be uſed. A clyſter of ſtarch or fat mutton-broth, with thirty or forty drops of liquid laudanum in it, may be adminiſtered twice a-day. At the ſame time an ounce of gum-arabic, and half an ounce of gum-tragacanth, may be diſſolved in an Engliſh pint of barley-water, over a ſlow fire, and a table-ſpoonful of it taken every hour. When dyſenteries prevail, we would recommend a ſtrict attention to cleanlineſs, a ſpare uſe of animal food, and the free uſe of ſound ripe fruits, and other vegetables. We would alſo adviſe ſuch as are liable to them to take either a vomit or a purge every ſpring or autumn, as a preventive.

## OF THE JAUNDICE.

THE immediate cauſe of the jaundice is an obſtruction of the bile. The patient at firſt complains of exceſſive wearineſs, and has great averſion to every kind of motion. His ſkin is dry, and he generally feels a kind of itching or pricking pain over the whole body. If the patient be young, and the diſeaſe complicated with no other malady, it is ſeldom dangerous; but in old people, where it continues long, returns frequently, or is complicated with the dropſy or hypochondriac ſymptoms, it generally proves fatal. The black jaundice is generally more dangerous than the yellow.

CURE.---The patient ſhould take as much exerciſe as he can bear, either on horſeback or in a carriage; walking, running, and even jumping, are likewiſe proper, provided he can bear them without pain, and there be no ſymptoms of inflammation. Patients have been often cured of this diſeaſe by a long journey, after medicines had proved ineffectual. If the patient be young, of a full ſanguine habit, and complains of pain in the right ſide about the region of the liver, bleeding will be neceſſary. After this a vomit muſt be adminiſtered; and, if the diſeaſe proves obſtinate, it may be repeated once or twice. No medicines are more beneficial in the jaundice than vomits, eſpecially where it is not attended with inflammation; half a drachm of ipecacuanha in powder will be a ſufficient doſe for an adult; it may be wrought off with weak camomile-tea, or lukewarm water. Fomenting the parts about the region of the ſtomach and liver, and rubbing them with a warm hand or fleſh-bruſh, are likewiſe beneficial; but it is ſtill more ſo for the patient to ſit in a bath of warm water up to the breaſt. He ought to do this frequently, and ſhould continue in it as long as his ſtrength will permit. Numberleſs Britiſh herbs are certain cures for this diſeaſe, as may be ſeen in the Herbal. I have known conſiderable benefit, in a very obſtinate jaundice, from a decoction of hempſeed; four ounces of the ſeed may be boiled in two Engliſh quarts of ale, and ſweetened with coarſe ſugar; the doſe is half a pint every morning; and it may be continued for eight or nine days. A very obſtinate jaundice has been cured by ſwallowing raw eggs. Perſons ſubject to the jaundice ought to take as much exerciſe as poſſible, and to avoid all heating and aſtringent aliments. If it attacks maidens after the age of puberty, marriage is a certain cure.

## OF THE DROPSY.

THE dropſy is often owing to an hereditary diſpoſition. It may likewiſe proceed from drinking ardent ſpirits or other ſtrong liquors. It is true almoſt to a proverb, that great drinkers die of a dropſy. The want of exerciſe is alſo a very common cauſe of the dropſy: hence it is juſtly reckoned among the diſeaſes of the ſedentary. It often proceeds from exceſſive evacuations, as frequent and copious bleedings, ſtrong purges often repeated, frequent ſalivations, &c. The ſudden ſtoppage of cuſtomary or neceſſary evacuations, as the menſes, the hæmorrhoids, fluxes of the belly, and, in ſhort, whatever obſtructs the perſpiration, or prevents the blood from being duly prepared, occaſions a dropſy. It generally begins with a ſwelling of the feet and ancles towards night, which, for ſome time, diſappears in the morning. In the evening, the parts, if preſſed with the finger, will pit. The ſwelling gradually aſcends, and occupies the trunk of the body, the arms, and the head. Afterwards the breathing becomes difficult, the urine is in ſmall quantity, and the thirſt great; the body is bound, and the perſpiration is greatly obſtructed. To theſe ſucceed torpor, heavineſs, a ſlow waſting fever, and a troubleſome cough. This laſt is gerally a fatal ſymptom, as it ſhews that the lungs are affected. When the diſeaſe comes ſuddenly on, and the patient is young and ſtrong, there is reaſon to hope for a cure, eſpecially if medicine be given early. But, if the patient be old, has led an irregular or a ſedentary life, or if there be reaſon to ſuſpect that the liver, lungs, or any of the viſcera, are unſound, there is good ground to fear that the conſequences will prove fatal.

CURE.---The patient muſt abſtain as much as poſſible from all drink, eſpecially weak and watery liquors, and muſt quench his thirſt with muſtard whey, or acids, as juice of lemons, oranges, ſorrel, or ſuch-like. His aliment ought to be dry, of a ſtimulating and diuretic quality, as toaſted bread; the fleſh of birds, or other wild animals, roaſted; pungent and aromatic vegetables, as garlic, muſtard, onions, creſſes, horſe-radiſh, rocambole, ſhalot, &c. He may alſo eat ſea-biſcuit dipped in wine or brandy. This is not only nouriſhing, but tends to quench thirſt. Some have been actually cured of a dropſy by a total abſtinence from all liquids, and living entirely upon ſuch things as are mentioned above. If the patient muſt have drink, the Spa-water, or Rheniſh wine, with diuretic medicines infuſed in it, are the beſt. Exerciſe is of the greateſt importance in a dropſy. If the patient be able to walk, dig, or the like, he ought to continue theſe exerciſes as long as he can. If he is not able to walk or labour, he muſt ride on horſeback, or in a carriage, and the more violent the motion ſo much the better, provided he can bear it. If the diſeaſe has come on ſuddenly, it may generally be removed by ſtrong vomits, briſk purges, and ſuch medicines as promote a diſcharge by ſweat and urine. For an adult, half a drachm of ipecacuanha in powder, and half an ounce of oxymel of ſquills, will be a proper vomit. This may be repeated as often as is found neceſſary, three or four days intervening between the doſes. The patient muſt not drink much after taking the vomit, otherwiſe he deſtroys its effects. A cup or two of camomile-tea will be ſufficient to work it off. Betwixt each vomit, on one of the intermediate days, the patient may take the following purge: Jalap in powder half a drachm, cream of tartar two drachms, calomel ſix grains. Theſe may be made into a bolus with a little ſyrup of pale roſes, and taken early in the morning. The leſs the patient drinks after it the better. If he be much griped, he may take now and then a cup of chicken-broth. The patient may likewiſe take every night at bed-time the following bolus: To four or five grains of camphor add one grain of opium, and as much ſyrup of orange-peel as is ſufficient to make them into a bolus. This will generally promote a gentle ſweat, which ſhould be encouraged by drinking now and then a ſmall cup of white-wine whey, with a tea-ſpoonful of the ſpirits of hartſhorn in it. A teacup-full of the following diuretic infuſion may likewiſe be taken every four or five hours through the day: Take juniper-berries, muſtard-ſeed, and horſe-radiſh, of each half an ounce; aſhes of broom half a pound; infuſe them in a quart of Rheniſh wine or ſtrong ale for a few days, and afterwards ſtrain off the liquor. Such as cannot take this infuſion, may uſe the decoction of ſeneka-root, which is both diuretic and ſudorific. I have known an obſtinate anaſarca cured by an infuſion of the aſhes of broom in wine. The above courſe will often cure an incidental dropſy, if the conſtitution be good; but, when the diſeaſe proceeds from a bad habit or an unſound ſtate of the viſcera, ſtrong purges and vomits are not to be ventured upon. In this caſe, the ſafer courſe is to palliate the ſymptoms by the uſe of ſuch medicines as promote the ſecretions, and to ſupport the patient's ſtrength by warm and nouriſhing cordials. The ſecretion of urine may be greatly promoted by nitre. Brookes ſays, he knew a young woman who was cured of a dropſy by taking a drachm of nitre every morning in a draught of ale, after ſhe had been given over as incurable; and a large ſpoonful of unbruiſed muſtard-ſeed taken every night and morning, and drinking half a pint of the decoction of the tops of green broom after it, has performed cures when other powerful medicines have proved ineffectual. When the diſeaſe does not evidently and ſpeedily give way to purgative and diuretic medicines, the water ought to be let off by tapping. This is a very ſimple and ſafe operation, and would often ſucceed, if it were performed in due time; but, if it be delayed till the humours are vitiated, or the bowels ſpoiled by long ſoaking in water, it can hardly be expected that any permanent relief will be procured. After the evacuation of the water, the patient is to be put on a courſe of ſtrengthening medicines; as the Peruvian bark, the elixir of vitriol, warm aromatics, with a due proportion of rhubarb infuſed in wine, and ſuch-like.

## OF THE GOUT.

THERE is no diſeaſe which ſhews the imperfection of medicine, or ſets the advantages of temperance and exerciſe in a ſtronger light, than the gout. Exceſs and idleneſs are the true ſources from whence it originally ſprang, and all who would avoid it muſt be active and temperate. As there are no medicines yet known that will cure the gout, we ſhall confine our obſervations chiefly to regimen, both in and out of the fit. In the fit, if the patient be young and ſtrong, his diet ought to be thin and cooling, and his drink of a diluting nature; but, where the conſtitution is weak, and the patient has been accuſtomed to live high, this is not a proper time to retrench. In this caſe he muſt keep nearly to his uſual diet, and ſhould take frequently a cup of ſtrong negus, or a glaſs of generous wine. Wine-whey is a very proper drink in this caſe, as it promotes the perſpiration without greatly heating the patient. It will anſwer this purpoſe better if a teaſpoon-full of *ſal volatile oleoſum*, or ſpirits of hartſhorn, be put into a cup of it twice a-day. It will likewiſe be proper to give at bed-time a teaſpoon-full of the volatile tincture of *guaiacum* in a large draught of warm wine-whey. This will greatly promote perſpiration through the night. As the moſt ſafe and efficacious method of diſcharging the gouty matter is by perſpiration, this ought to be kept up by all means, eſpecially in the affected part. For this purpoſe the leg and foot ſhould be wrapped in ſoft flannel, fur, or wool. The laſt is moſt readily obtained, and ſeems to anſwer the purpoſe better than any thing elſe. The people of Lancaſhire look upon wool as a kind of ſpecific in the gout. They wrap a great quantity of it about the leg and foot affected, and cover it with a ſkin of ſoft dreſſed leather.

The wool which they uſe is generally greaſed, and carded or combed. They chuſe the ſofteſt which can be had, and ſeldom or never remove it till the fit be entirely gone off. All external applications that repel the matter are to be avoided as death. They do not cure the diſeaſe, but remove it from a ſafer to a more dangerous part of the body, where it often proves fatal. Many things will ſhorten a fit of the gout, and ſome will drive it off altogether; but nothing has yet been found which will do this with ſafety to the patient. In pain we eagerly graſp at any thing that promiſes immediate eaſe, and even hazard life itſelf for a temporary relief. This is the true reaſon why ſo many infallible remedies have been propoſed for the gout, and why ſuch numbers have loſt their lives by the uſe of them. It would be as imprudent to ſtop the ſmall-pox from riſing, and to drive it into the blood, as to attempt to repel the gouty matter after it has been thrown upon the extremities. The latter is as much an effort of nature to free herſelf from an offending cauſe as the former, and ought equally to be promoted. When the pain however is very great, and the patient is reſtleſs, thirty or forty drops of laudanum, more or leſs, according to the violence of the ſymptoms, may be taken at bed-time. This will eaſe the pain, procure reſt, promote perſpiration, and forward the criſis of the diſeaſe. Though it may be dangerous to ſtop a fit of the gout by medicine, yet if the conſtitution can be ſo changed by diet and exerciſe, as to leſſen or totally to prevent its return, there certainly can be in no danger in following ſuch a courſe. It is well known that the whole habit may be ſo altered by a proper regimen, as nearly to eradicate this diſeaſe; and thoſe only who have ſufficient reſolution to perſiſt in ſuch a courſe, have reaſon to expect a cure. The courſe which we would recommend for preventing the gout, is as follows: in the firſt place, univerſal temperance; in the next place, ſufficient exerciſe. By this we do not mean ſauntering about in an indolent manner; but labour, ſweat, and toil. Theſe only can render the humours wholeſome, and keep them ſo. Going early to bed, and riſing betimes, are alſo of great importance. When the gout attacks the head or lungs, every method muſt be taken to fix it in the feet. They muſt be frequently bathed in warm water, and acrid cataplaſms applied to the ſoles. Bliſters ought likewiſe to be applied to the ancles or calves of the legs. Bleeding in the feet or ancles is alſo neceſſary, and warm ſtomachic purges. The patient ought to keep in bed for the moſt part, if there be any ſigns of inflammation, and ſhould be very careful not to catch cold. If it attacks the ſtomach with a ſenſe of cold, the moſt warm cordials are neceſſary; as ſtrong wine boiled up with cinnamon or other ſpices, cinnamon-water, peppermint-water, and even brandy or rum. The patient ſhould keep his bed, and endeavour to promote a ſweat by drinking warm liquors; and, if he ſhould be troubled with nauſea, or inclination to vomit, he may drink camomile tea, or any thing that will make him vomit freely. Thoſe who never had the gout, but who, from their conſtitution or manner of living, have reaſon to expect it, ought likewiſe to be very circumſpect with regard to its firſt approach. If the diſeaſe, by wrong conduct or improper medicines, be diverted from its proper courſe, the miſerable patient has a chance to be ever after tormented with head-achs, coughs, pains of che ſtomach and inteſtines; and to fall, at laſt, a victim to its attack upon ſome of the more noble parts.

## OF THE RHEUMATISM.

THE cauſes of a rheumatiſm are frequently the ſame as thoſe of an inflammatory fever; viz. an obſtructed perſpiration, the immoderate uſe of ſtrong liquors, and the like. Sudden changes of the weather, and all quick tranſitions from heat to cold, are very apt to occaſion the rheumatiſm. The acute rheumatiſm commonly begins with wearineſs, ſhivering, a quick pulſe, reſtleſſneſs, thirſt, and other ſymptoms of fever. Afterwards the patient complains of flying pains, which are increaſed by the leaſt motion. Theſe at length fix in the joints, which are often affected with ſwelling and inflammation. If blood be let in this diſeaſe, it has generally the ſame appearance as in the pleuriſy. In this kind of rheumatiſm the treatment of the patient is nearly the ſame as in an acute or inflammatory fever. If he be young and ſtrong, bleeding is neceſſary, which may be repeated according to the exigencies of the caſe. The body ought likewiſe to be kept open by emollient clyſters, or cool opening liquors; as decoctions of tamarinds, cream of tartar, whey, ſenna-tea, and the like. Warm bathing, after proper evacuations, has often an exceeding good effect. The patient may be either put into a bath of warm water, or have cloths wrung out of it applied to the parts affected. Great care muſt be taken that he do not catch cold after bathing. The chronic rheumatiſm is ſeldom attended with any conſiderable degree of fever, and is generally confined to ſome particular part of the body, as the ſhoulders, the back, or the loins. There is ſeldom any inflammation or ſwelling in this caſe. Perſons in the decline of life are moſt ſubject to the chronic rheumatiſm. In ſuch patients it often proves extremely obſtinate, and ſometimes incurable. Though this diſeaſe may not ſeem to yield to medicines for ſome time, yet they ought to be perſiſted in. Perſons who are ſubject to frequent returns of the rheumatiſm, will often find their account in uſing medicines, whether they be immediately affected with the diſeaſe or not. The chronic rheumatiſm is ſimilar to the gout in this reſpect, that the moſt proper time for uſing medicines to extirpate it, is when the patient is moſt free from the diſorder. There are ſeveral of our plants pointed out in the Herbal which may be uſed with great advantage in the rheumatiſm. One of the beſt is the white muſtard; a table-ſpoonful of the ſeed of this plant may be taken twice or thrice a-day, in a glaſs of water or ſmall wine. The water-trefoil is likewiſe of great uſe in this complaint; it may be infuſed in wine or ale, or drunk in form of tea. The ground-ivy, camomile, and ſeveral other bitters, are alſo beneficial, and may be uſed in the ſame manner. No benefit however is to be expected from theſe, unleſs they be taken for a conſiderable time. Excellent medicines are often deſpiſed in this diſeaſe, becauſe they do not perform an immediate cure; whereas nothing would be more certain than their effect, were they duly perſiſted in. Want of perſeverance in the uſe of medicines is one reaſon why chronic diſeaſes are ſo ſeldom cured. Cold bathing, eſpecially in ſalt-water, often cures the rheumatiſm. We would alſo recommend riding on horſeback, and wearing flannel next the ſkin. Iſſues are likewiſe very proper, eſpecially in chronic caſes. If the pain affects the ſhoulders, an iſſue may be made in the arm; but, if it affects the loins, it ſhould be put in the leg or thigh.

## OF THE SCURVY.

THE ſcurvy is occaſioned by cold moiſt air; by the long uſe of ſalted or ſmoke-dried proviſions, or any kind of food that is hard of digeſtion, and affords little nouriſhment. It may alſo proceed from the ſuppreſſion of cuſtomary evacuations; as the menſes, the hæmorrhoidal flux, &c. It is ſometimes owing to an hereditary taint, in which caſe a very ſmall cauſe will excite the latent diſorder. Grief, fear, and other depreſſing paſſions, have a great tendency both to excite and aggravate this diſeaſe. The ſame obſervation holds with regard to neglect of cleanlineſs; bad clothing, the want of proper exerciſe, confined air, unwholeſome food, or any diſeaſe which greatly weakens the body or vitiates the humours.

CURE.---There is no way of curing this diſeaſe ſo effectually, as by purſuing a plan directly oppoſite to that which brings it on. It proceeds from a vitiated ſtate of the humours, occaſioned by errors in diet, air, or exerciſe; and this cannot be removed but by a proper attention to theſe important articles. When the ſcurvy has been brought on by a long uſe of ſalted proviſions, the proper medicine is a diet conſiſting chiefly of freſh vegetables; as oranges, apples, lemons, limes, tamarinds, water-creſſes, ſcurvy-graſs, brook-lime, &c. The uſe of theſe, with milk, pot-herbs, new bread, and freſh beer or cyder, will ſeldom fail to remove a ſcurvy of this kind, if taken before it be too far advanced; but, to have this effect, they muſt be perſiſted in for a conſiderable time. I have often ſeen very extraordinary effects in the land-ſcurvy from a milk diet. This preparation of nature is a mixture of animal and vegetable properties, which of all others is the moſt fit for reſtoring a decayed conſtitution, and removing that particular acrimony of the humours, which ſeems to conſtitute the very eſſence of the ſcurvy, and many other diſeaſes. But people deſpiſe this wholeſome and nouriſhing food, becauſe it is cheap, and devour with greedineſs fleſh and fermented liquors, while milk is only deemed fit for their hogs. The moſt proper drink in the ſcurvy is whey or butter-milk. When theſe cannot be had, ſound cyder, perry, or ſpruce beer, may be uſed. Wort has likewiſe been found to be a proper drink in the ſcurvy, and may be uſed at ſea, as malt will keep during the longeſt voyage. A decoction of the tops of the ſpruce fir is likewiſe proper; it may be drunk in the quantity of an Engliſh pint twice a-day. Tar-water may be uſed for the ſame purpoſe, or decoctions of any of the mild mucilaginous vegetables; ſarſaparilla, marſh-mallow-roots, &c. Infuſions of the bitter plants, as ground-ivy, the ſmaller centaury, marſh-trefoil, &c. are likewiſe beneficial. The peaſants, in ſome parts of Britain, expreſs the juice of the laſt-mentioned plant, and drink it with good effect in thoſe foul ſcorbutic eruptions with which they are often troubled in the ſpring ſeaſon.

## OF THE SCROPHULA, OR KING'S EVIL.

THIS diſeaſe proceeds often from an hereditary taint, from a ſcophulous nurſe, &c. Children who have the misfortune to be born of ſickly parents, whoſe conſtitutions have been greatly injured by chronic diſeaſes, are apt to be affected with the ſcrophula. It may likewiſe proceed from ſuch diſeaſes as weaken the habit or vitiate the humours, as the ſmall-pox, meaſles, &c. At firſt ſmall knots appear under the chin or behind the ears, which gradually increaſe in number and ſize, till they form one large hard tumour. This often continues for a long time without breaking, and, when it does break, it only diſcharges a thin watery humour. Other parts of the body are likewiſe liable to its attack, as the arm-pits, groins, feet, hands, eyes, breaſt, &c. The white ſwellings of the joints ſeem likewiſe to be of this kind. They are with difficulty brought to a ſuppuration, and, when opened, they only diſcharge a thin ichor. There is not a more general ſymptom of the ſcrophula than a ſwelling of the upper lip and noſe.

CURE.---In this complaint medicine is but of little uſe. It has been found, that keeping the body gently open, for ſome time, with ſea-water, has a good effect. Bathing in ſalt water, and drinking it in ſuch quantities as to keep the body gently open, will cure a ſcrophula, when medicines have been tried in vain. When ſalt water cannot be obtained, the patient may be bathed in freſh water, and his body kept open by ſmall quantities of ſalt and water, or ſome other mild purgative. Next to cold bathing, and drinking the ſalt water, we would recommend the Peruvian bark. The cold bath may be uſed in ſummer, and the bark in winter. To an adult half a drachm of the bark in powder may be given, in a glaſs of red-wine, four or five times a-day. Hemlock may ſometimes be uſed with advantage in the ſcrophula. Some lay it down as a general rule, that the ſea-water is moſt proper before there are any ſuppuration or ſymptoms of tabes; the Peruvian bark, when there are running ſores, and a degree of hectic fever; and the hemlock in old inveterate caſes, approaching to the ſchirrhous or cancerous ſtate. Either the extract or the freſh juice of this plant may be uſed. The doſe muſt be ſmall at firſt, and increaſed gradually as far as the ſtomach is able to bear it.

## OF THE ITCH.

THE itch is ſeldom a dangerous diſeaſe, unleſs when it is rendered ſo by neglect, or improper treatment. If it be ſuffered to continue too long, it may vitiate the whole maſs of humours; and, if it be ſuddenly thrown in, without proper evacuations, it may occaſion fevers, inflammations of the viſcera, or other internal diſorders.

CURE.---The beſt medicine yet known for the itch is ſulphur, which ought to be uſed both externally and internally. The parts moſt affected may be rubbed with an ointment made of the flour of ſulphur, two ounces; crude ſal ammoniac, finely powdered, two drachms; hog's lard, or butter, four ounces. If a ſcruple or half a drachm of the eſſence of lemon be added, it will entirely take away the diſagreeable ſmell. About the bulk of a nutmeg of this may be rubbed upon the extremities, at bed-time, twice or thrice a week. It is ſeldom neceſſary to rub the whole body; but, when it is, it ought not to be done all at once, but by turns, as it is dangerous to ſtop too many pores at the ſame time. Before the patient begins to uſe the ointment, he ought, if he be of a full habit, to bleed or take a purge or two. It will likewiſe be proper, during the uſe of it, to take every night and morning as much of the flour of brimſtone and cream of tartar, in a little treacle or new milk, as will keep the body gently open. I never knew brimſtone, when uſed as directed above, fail to cure the itch; and I have reaſon to believe, that, if duly perſiſted in, it never will fail; but, if it be only uſed once or twice, and cleanlineſs neglected, it is no wonder if the diſorder returns. The quantity of ointment mentioned above will generally be ſufficient for the cure of one perſon; but, if any ſymptoms of the diſeaſe ſhould appear again, the medicine may be repeated. It is both more ſafe and efficacious when perſiſted in for a conſiderable time, than when a large quantity is applied at once. As moſt people diſlike the ſmell of ſulphur, they may uſe, in its place, the powder of white hellebore-root made up into an ointment, in the ſame manner, which will ſeldom fail to cure the itch. People ought to be extremely cautious leſt they take other eruptions for the itch; as the ſtoppage of theſe may be attended with fatal conſequences. Many of the eruptive diſorders to which children are liable have a near reſemblance to this diſeaſe; and I have often known infants killed by being rubbed with greaſy ointments, that made theſe eruptions ſtrike ſuddenly in, which nature had thrown out to preſerve the patient's life, or prevent ſome other malady.

## OF THE ASTHMA.

THE aſthma is a diſeaſe of the lungs, which ſeldom admits of a cure. Perſons in the decline of life are moſt liable to it. It is diſtinguiſhed into the moiſt and dry, or humoral and nervous. The former is attended with expectoration or ſpitting; but in the latter the patient ſeldom ſpits, unleſs ſometimes a little tough phlegm by the mere force of coughing. An aſthma is known by a quick laborious breathing, which is generally performed with a kind of wheezing noiſe. Sometimes the difficulty of breathing is ſo great, that the patient is obliged to keep in an erect poſture, otherwiſe he is in danger of being ſuffocaced. A fit or paroxyſm of the aſthma generally happens after a perſon has been expoſed to cold eaſterly winds, or has been abroad in thick foggy weather, or has got wet, or continued long in a damp place under ground, &c.

CURE.---All windy food, and whatever is apt to ſwell in the ſtomach, is to be avoided. Strong liquors of all kinds, eſpecially malt-liquor, are hurtful. The patient ſhould eat a very light ſupper, or rather none at all, and ſhould never ſuffer himſelf to be long coſtive. His clothing ſhould be warm, eſpecially in the winter-ſeaſon. As all diſorders of the breaſt are much relieved by keeping the feet warm, and promoting the perſpiration, a flannel ſhirt or waiſtcoat, and thick ſhoes, will be of ſingular ſervice. But nothing is of ſo great importance in the aſthma as pure and moderately warm air. Many aſthmatic perſons, who cannot live in Britain, enjoy very good health in the ſouth of France, Portugal, Spain, or Italy. Exerciſe is likewiſe of very great importance in the aſthma, as it promotes the digeſtion, preparation of the blood, &c. The blood of aſthmatic perſons is ſeldom duly prepared, owing to the proper action of the lungs being impeded. For this reaſon ſuch people ought daily to take as much exerciſe, either on foot, on horſeback, or in a carriage, as they can bear. Almoſt all that can be done by medicine in this diſeaſe, is to relieve the patient when ſeized with a violent fit. Bleeding, unleſs extreme weakneſs or old age ſhould forbid it, is highly proper. If there be a violent ſpaſm about the breaſt or ſtomach, warm fomentations, or bladders filled with warm milk and water, may be applied to the part affected, and warm cataplaſms to the ſoles of the feet. The patient muſt drink freely of diluting liquors, and may take a teaſpoon-full of the tincture of caſtor and of ſaffron mixed together, in a cup of valerian-tea, twice or thrice a-day. Sometimes a vomit has a very good effect, and ſnatches the patient, as it were, from the jaws of death. This however will be more ſafe after other evacuations have been premiſed. A very ſtrong infuſion of roaſted coffee is ſaid to give eaſe in an aſthmatic paroxyſm. In the moiſt aſthma, ſuch things as promote expectoration or ſpitting ought to be uſed; as the ſyrup of ſquills, gum-ammoniac, and ſuch-like. A common ſpoonful of the ſyrup of oxymel of ſquills, mixed with an equal quantity of cinnamon-water, may be taken three or four times through the day; and four or five pills, made of equal parts of aſſafœtida and gum-ammoniac, at bed-time. Large doſes of æther have been found very efficacious in removing a fit of the aſthma. For the convulſive or nervous aſthma, antiſpaſmodics and bracers are the moſt proper medecines- The patient may take a teaſpoon-full of the paregoric elixir twice a-day. The Peruvian bark is ſometimes found to be of uſe in this caſe. It may be taken in ſubſtance, or infuſed in wine. In ſhort, every thing that braces the nerves, or takes off ſpaſm, may be of uſe in a nervous aſthma. It is often relieved by the uſe of aſſes milk; I have likewiſe known cows milk drunk warm in the morning have a good effect in this caſe. In every ſpecies of aſthma, ſetons and iſſues are of great ſervice; they may either be put in the back or ſide, and ſhould never be allowed to dry up. We ſhall here, once for all, obſerve, that not only in the aſthma, but in moſt chronic diſeaſes, iſſues are extremely proper. They are both a ſafe and efficacious remedy; and, though they do not always cure the diſeaſe, yet they will often prolong the patient's life.

## OF THE APOPLEXY.

THE immediate cauſe of an apoplexy is a compreſſion of the brain, occaſioned by an exceſs of blood, or a collection of watery humours. The former is called a *ſanguine*, and the latter a *ſerous*, *apoplexy*. It may be occaſioned by any thing that increaſes the circulation towards the brain, or prevents the return of the blood from the head; intenſe ſtudy, violent paſſions, ſuppreſſion of urine, exceſs of venery, the ſudden ſtriking in of any eruption, wounds or bruiſes on the head, long expoſure to exceſſive cold, poiſonous exhalations, &c.

CURE.---The uſual forerunners of an apoplexy are giddineſs, pain an ſwimming of the head, loſs of memory, drowſineſs, noiſe in the ears, the night-mare, a ſpontaneous flux of tears, and laborious reſpiration. When perſons have reaſon to fear the approach of a fit, they ſhould endeavour to prevent it by bleeding, a ſlender diet, and opening medicines. In the apoplexy, if the patient does not die ſuddenly, the countenance appears florid, the face is ſwelled or puffed up, and the blood-veſſels, eſpecially about the neck and temples, are turgid; the pulſe beats ſtrong, the eyes are prominent and fixed, and the breathing is difficult, and performed with a ſnorting noiſe. The excrements and urine are often voided ſpontaneouſly, and the patient is ſometimes ſeized with vomiting. In this ſtage, every method muſt be taken to leſſen the force of the circulation towards the head. The garters ſhould be tied pretty tight, by which means the motion of the blood from the lower extremities will be retarded. The patient ſhould be bled freely in the neck or arm, and, if there be occaſion, the operation may be repeated in two or three hours. A laxative clyſter, with plenty of ſweet oil, or freſh butter, and a ſpoonful or two of common ſalt in it, may be adminiſtered every two hours; and bliſtering plaſters applied betwixt the ſhoulders and the calves of the legs. As ſoon as the ſymptoms are a little abated, and the patient is able to ſwallow, he ought to drink freely of ſome diluting opening liquors, as a decoction of tamarinds and liquorice, cream-tartar. whey, or common whey with cream of tartar diſſolved in it. Or he may take any cooling purge, as Glauber's ſalts, manna diſſolved in an infuſion of ſenna, or the like. All ſpirits and other ſtrong liquors are to be avoided. Even volatile ſalts held to the noſe do miſchief. Vomits, for the ſame reaſon, ought not to be given, nor any thing that may increaſe the motion of the blood toward the head.. When apoplectic ſymptoms proceed from opium or other narcotic ſubſtances taken into the ſtomach, vomits are neceſſary. The patient is generally relieved as ſoon as he has diſcharged the poiſon in this way.

## OF THE HEART-BURN.

WHAT is commonly called the heart-burn is not a diſeaſe of the organ, but an uneaſy ſenſation of heat or acrimony about the pit of the ſtomach, which is ſometimes attended with anxiety, nauſea, and vomiting. When the heart-burn proceeds from debility of the ſtomach or indigeſtion, the patient ought to take a doſe or two of rhubarb; afterwards he may uſe infuſions of the Peruvian bark, or any other of the ſtomachic bitters, in wine or brandy. Exerciſe in the open air will likewiſe be of uſe, and every thing that promotes digeſtion. When bilious humours occaſion the heart-burn, a teaſpoon-full of the ſweet ſpirit of nitre in a glaſs of water, or a cup of tea, will generally give eaſe. If it proceeds from the uſe of greaſy aliments, a dram of brandy or rum may be taken. If acidity or ſourneſs of the ſtomach occaſions the heart-burn, abſorbents are the proper medicines. In this this caſe an ounce of powdered chalk, half an ounce of fine ſugar, and a quarter of an ounce of gum-arabic, may be mixed in an Engliſh quart of water, and a teacup-full of it taken as often as is neceſſary. But the ſafeſt and beſt abſorbent is magneſia alba. This not only acts as an abſorbent, but likewiſe as a purgative; whereas chalk, and other abſorbents of that kind, are apt to lie in the inteſtines, and occaſion obſtructions. If wind be the cauſe of this complaint, the moſt proper medicines are thoſe called carminatives; as anniſeed, juniper-berries, ginger, canella alba, cardamom-ſeeds, &c. Theſe may either be chewed, or infuſed in wine, brandy, or other ſpirits. I have frequently known the heart-burn cured, particularly in pregnant women, by chewing green tea.

## OF NERVOUS DISEASES.

NERVOUS diſeaſes not only affect the body, but the mind likewiſe ſuffers, and is often thereby rendered extremely weak and peeviſh. The low ſpirits, timorouſneſs, melancholy, and fickleneſs of temper, which generally attend nervous diſorders, induce many to believe, that they are entirely diſeaſes of the mind; but this change of temper is rather a conſequence, than the cauſe, of the diſeaſe. Every thing that tends to relax or weaken the body diſpoſes it to nervous diſeaſes, as indolence, exceſſive venery, drinking too much tea, or other weak watery liquors, frequent bleeding, purging, vomiting, &c.

CURE.---Perſons afflicted with nervous diſeaſes ought never to faſt long. Their food ſhould be ſolid and nouriſhing, but of eaſy digeſtion. Fat meats, and high ſauces, are hurtful. All exceſs ſhould be carefully avoided. They ought never to eat more at a time than they can eaſily digeſt; but, if they feel themſelves weak and faint between meals, they ought to eat a bit of bread, and drink a glaſs of wine. Heavy ſuppers are to be avoided. Though wine in exceſs enfeebles the body, and impairs the faculties of the mind, yet, taken in moderation, it ſtrengthens the ſtomach, and promotes digeſtion. Exerciſe in nervous diſorders is ſuperior to all medicines. Even change of place, and the ſight of new objects, by diverting the mind, have a great tendency to remove theſe complaints. For this reaſon a long journey, or a voyage, is of much more advantage than riding ſhort journeys near home. Though nervous diſeaſes are ſeldom radically cured, yet their ſymptoms may ſometimes be alleviated, and the patient's life rendered, at leaſt, more comfortable, by proper medicines. When digeſtion is bad, or the ſtomach relaxed and weak, the following infuſion of Peruvian bark and other bitters may be uſed with advantage. Take of Peruvian bark an ounce, gentian-root, orange-peel, and coriander-ſeed, of each half an ounce; let theſe ingredients be all bruiſed in a mortar, and infuſed in a bottle of brandy or whiſkey for the ſpace of five or ſix days. A tableſpoon-full of the ſtrained liquor may be taken in half a glaſs of water, an hour before breakfaſt, dinner, and ſupper. Few things tend more to ſtrengthen the nervous ſyſtem than cold bathing. This practice, if duly perſiſted in, will produce very extraordinary effects; but when the liver or other viſcera are obſtructed, or otherwiſe unſound, the cold bath is improper. It is therefore to be uſed with very great caution. The moſt proper ſeaſons for it are ſummer and autumn. It will be ſufficient, eſpecially for perſons of a ſpare habit, to go into the cold bath three or four times a-week. If the patient be weakened by it, or feels chilly for a long time after coming out, it is improper. Opiates are generally extolled in theſe maladies; but, as they only palliate the ſymptoms, and generally afterwards increaſe the diſeaſe, we would adviſe people to be extremely ſparing in the uſe of them, leſt habit render them at laſt abſolutely neceſſary. Whoever wiſhes for a thorough cure of this diſeaſe, ſhould pay the ſtricteſt attention to diet, air, exerciſe, and amuſement.

## OF THE PALSY.

THE palſy is a loſs or diminution of ſenſe or motion, or of both, in one or more parts of the body. Of all the affections called nervous, this is the moſt ſuddenly fatal. The immediate cauſe of the palſy is any thing that prevents the regular exertion of the nervous power upon any particular muſcle or part of the body. The occaſional and prediſpoſing cauſes are various, as drunkenneſs, wounds of the brain or ſpinal marrow, preſſure upon the brain or nerves, very cold or damp air, the ſuppreſſion of cuſtomary evacuations, ſudden fear, want of exerciſe, or whatever greatly relaxes the ſyſtem.

CURE.---In young perſons of a full habit, the palſy muſt be treated in the ſame manner as the apoplexy. The patient muſt be bled, bliſtered, and have his body opened by ſharp clyſters or purgative medicines. But, in old age, or when the diſeaſe proceeds from relaxation or debility, which is generally the caſe, a quite contrary courſe muſt be purſued. The diet muſt be warm and invigorating, ſeaſoned with ſpicy and aromatic vegetables, as muſtard, horſe-radiſh, &c. The drink may be generous wine, muſtard-whey, or brandy and water. Friction with the fleſh-bruſh, or warm hand, is extremely proper, eſpecially on the parts affected. Bliſters may likewiſe be applied to the affected parts with advantage. One of the beſt external applications is electricity. The ſhocks ſhould be received on the part affected; and they ought daily to be repeated for ſeveral weeks. Vomits are very beneficial in this kind of palſy, and ought frequently to be adminiſtered. The wild valerian-root is a very proper medicine in this caſe. It may either be taken in an infuſion with ſage-leaves, or half a drachm of it in powder may be given in a glaſs of wine three times a-day. If the patient cannot uſe the valerian, he may take of *ſal volatile oleoſum*, compound ſpirit of lavender, and tincture of caſtor, each half an ounce; mix theſe together, and take forty or fifty drops in a glaſs of wine, three or four times a-day. A tableſpoon-full of muſtard-ſeed, taken frequently, is a very good medicine. The patient ought likewiſe to chew cinnamon-bark, ginger, or other warm ſpices. Exerciſe is of the utmoſt importance in the palſy; but the patient muſt beware of cold, damp, and moiſt, air. He ought to wear flannel next his ſkin; and, if poſſible, ſhould remove into a warmer climate.

## OF THE EPILEPSY, OR FALLING SICKNESS.

THE epilepſy is a ſudden deprivation of all the ſenſes, wherein the patient falls ſuddenly down, and is affected with violent convulſive motions. It is ſometimes hereditary. It may likewiſe proceed from frights of the mother when with child, from blows, bruiſes, or wounds, on the head; a collection of water, blood, or ſerous humours, in the brain; a polypus, tumours, or concretions within the ſkull, exceſſive drinking, intenſe ſtudy, exceſs of venery, worms, teething, ſuppreſſion of cuſtomary evacuations, too great emptineſs or repletion; violent paſſions or affections of the mind, as fear, joy, &c. hyſteric affections, contagion received into the body, as the infection of the ſmall-pox, meaſles, &c. In an epileptic fit, the patient generally makes an unuſual noiſe; his thumbs are drawn in towards the palms of the hands, his eyes are diſtorted, he ſtarts and foams at the mouth, his extremities are bent or twiſted various ways, he often diſcharges his ſeed, urine, and fæces, involuntarily, and is quite deſtitute of all ſenſe and reaſon. After the fit is over, his ſenſes gradually return, and he complains of a kind of ſtupor, wearineſs, and pain of his head; but has no remembrance of what happened to him during the fit.

CURE.---If the patient be of a ſanguine temperament, and there be reaſon to fear an obſtruction in the brain, bleeding and other evacuations will be neceſſary. When the diſeaſe is occaſioned by the ſtoppage of cuſtomary evacuations, theſe, if poſſible, muſt be reſtored; if this cannot be done, others may be ſubſtituted in their place. Iſſues or ſetons, in this caſe, have often a very good effect. When there is reaſon to believe that the diſeaſe proceeds from worms, proper medicines muſt be uſed to kill, or carry off, theſe vermin. When the diſeaſe proceeds from teething, the body ſhould be kept open by emollient clyſters, the feet frequently bathed in warm water, and, if the fit proves obſtinate, a bliſter may be put betwixt the ſhoulders. The ſame method is to be followed, when epileptic fits precede the eruption of the ſmall-pox, or meaſles, &c. The flowers of zink have of late been highly extolled for the cure of the epilepſy. Though this medicine will not be found to anſwer the expectations which have been raiſed concerning it, yet in obſtinate epileptic caſes it deſerves a trial. The doſe is from one to three or four grains, which may be taken either in pills or a bolus, as the patient inclines. The beſt method is to begin with a ſingle grain four or five times a-day, and gradually to increaſe the doſe as far as the patient can bear it. Muſk has ſometimes been found to ſucceed in the epilepſy. Ten or twelve grains of it, with the ſame quantity of factitious cinnabar, may be made up into a bolus, and taken every night and morning. Sometimes the epilepſy has been cured by electricity. Convulſion-fits proceed from the ſame cauſes, and muſt be treated in the ſame manner, as the epilepſy.

## Of the HICCUP.

THE hiccup is a ſpaſmodic or convulſive affection of the ſtomach and midriff, ariſing from any cauſe that irritates their nervous fibres.

CURE.---When the hiccup proves very obſtinate, recourſe muſt be had to the moſt powerful aromatic and antiſpaſmodic medicines. The principal of theſe is muſk; fifteen or twenty grains of which may be made into a bolus, and repeated occaſionally. Opiates are likewiſe of ſervice; but they muſt be uſed with caution. A bit of ſugar dipped in compound ſpirits of lavender, or the volatile aromatic tincture, may be taken frequently. External applications are ſometimes alſo beneficial; as the ſtomach plaſter, or a cataplaſm of the Venice treacle, applied to the region of the ſtomach.

## CRAMP OF THE STOMACH.

THIS diſeaſe often ſeizes people ſuddenly, is very dangerous, and requires immediate aſſiſtance. It is moſt incident to perſons in the decline of life, eſpecially the nervous, gouty, hyſteric, and hypochondriac.

CURE.---Let the ſtomach be fomented with cloths dipped in warm water; or bladders filled with warm milk and water conſtantly applied to it. Theſe often produce the moſt happy effects. In very violent and laſting pains of the ſtomach, ſome blood ought to be let, unleſs the weakneſs of the patient forbids it. When the pain or cramp proceeds from a ſuppreſſion of the menſes, bleeding is of uſe. If they be owing to the gout, recourſe muſt be had to ſpirits, or ſome of the warm cordial waters. Bliſters ought likewiſe, in this caſe, to be applied to the ancles. Violent cramps and pains of the ſtomach are often removed by covering it with a large plaſter of Venice treacle.

## OF THE NIGHT-MARE.

IN this diſeaſe, the patient, in time of ſleep, imagines he feels an uncommon oppreſſion or weight about his breaſt or ſtomach, which he can by no means ſhake off. He groans, and ſometimes cries out, though oftener he attempts to ſpeak, but in vain. Sometimes he imagines himſelf engaged with an enemy, and in danger of being killed, attempts to run away, but finds he cannot. Sometimes he fancies himſelf in a houſe that is on fire, or that he is in danger of being drowned in a river. He often thinks he is falling over a precipice, and the dread of being daſhed to pieces ſuddenly awakes him. This diſorder has been ſuppoſed to proceed from too much blood; from a ſtagnation of blood in the brain, lungs, &c. But it is rather a nervous affection, and ariſes chiefly from indigeſtion. Hence we find that perſons of weak nerves, who lead a ſedentary life, and live full, are moſt commonly afflicted with the night-mare. Nothing tends more to produce it than heavy ſuppers, eſpecially when eaten late, or the patient goes to bed ſoon after.

CURE.---As perſons afflicted with the night-mare generally moan or make ſome noiſe in the fit, they ſhould be waked or ſpoken to by ſuch as hear them, as the uneaſineſs generally goes off as ſoon as the patient is awake, or any one limb is moved; but there is oftentimes an univerſal laſſitude of the whole body left behind, which remains for ſome ſpace of time. Some ſay a dram of brandy taken at bed-time will prevent this diſeaſe. That, however, is a bad cuſtom, and, in time, loſes its effect. We would rather have the patient depend upon the uſe of food of eaſy digeſtion, cheerfulneſs, exerciſe through the day, and a light ſupper taken early, than to accuſtom himſelf to drams. A glaſs of peppermint-water will often promote digeſtion as much as a glaſs of brandy, and is much ſafer. After a perſon of weak digeſtion, however, has eaten flatulent food, a dram may be neceſſary; in this caſe we would recommend it as the moſt proper medicine. Perſons who are young, and full of blood, if troubled with the night-mare, ought to take a purge frequently, and uſe a ſpare diet.

The night-mare was ſuppoſed by the ancients not to be any real diſorder of the body, but to be an effect, or ſenſation, derived from carnal contact in the night with ſome evil ſpirit or dæmon during the hours of ſleep. They contended, that perſons of a luſtful inclination, who, during the day, indulged in ſtrong deſires of copulation, and had dreams anſwerable thereto in the night, were frequently viſited by theſe evil ſpirits, whoſe buſineſs it was to watch for favourable opportunities of ſeducing the mind, already half alienated from virtue and chaſtity, to the moſt laſcivious imaginations, the better to complete their purpoſe of carnal indulgence and delight. When the weight and oppreſſion on the breaſt and ſtomach produced by this diſorder happened to females, it was called *incubus*, or a *male* monſter; and, when to males, it was called *ſuccubus*, or a *female* dæmon, which had contact with the man, ſimilar to the male monſter with the woman; and the laſſitude and fatigue left on the body by the diſeaſe were ſuppoſed to be the natural effect of this abominable copulation. Abſurd as was the doctrine, whole volumes have been written upon it; and in former days it opened a large field for prieſt-craft and ſeduction of poor ignorant unſuſpecting girls. How many reaſons have we to be thankful for the lights of the goſpel diſpenſed in our own tongue, and for the illuminations of the preſent æra.

## OF FLATULENCIES, OR WIND.

ALL nervous patients, without exception, are afflicted with wind or flatulencies in the ſtomach and bowels, which ariſe chiefly from the want of tone or vigour in theſe organs. Crude flatulent aliment, as green peaſe, beans, coleworts, cabbages, and ſuch-like, may increaſe this complaint; but ſtrong and healthy people are ſeldom troubled with wind, unleſs they either overload their ſtomachs, or drink liquors that are in a fermenting ſtate, and conſequently full of elaſtic air. While therefore the matter of flatulence proceeds from our aliment, the cauſe which makes air ſeparate from them in ſuch quantity as to occaſion complaints is almoſt always a fault of the bowels themſelves, which are too weak either to prevent the production of elaſtic air, or to expel it after it is produced.

CURE.---To relieve this complaint, ſuch medicines ought to be uſed as have a tendency to expel wind, and, by ſtrengthening the alimentary canal, to prevent its being produced there. The liſt of medicines for expelling wind is very numerous; they often however diſappoint the expectations of both the phyſician and his patient. The moſt celebrated among the claſs of carminatives are juniper-berries; the roots of ginger and zedoary; the ſeeds of aniſe, carraway, and coriander; gum aſſafœtida and opium; the warm waters, tinctures, and ſpirits, aromatic water, tincture of woodſoot, volatile aromatic ſpirit, æther, &c. For ſtrengthening the ſtomach and bowels, and conſequently for leſſening the production of flatulence, the Peruvian bark, bitters, chalybeates, and exerciſe, are the beſt remedies.

## OF HYSTERIC COMPLAINTS.

THESE belong to the numerous tribe of nervous diſeaſes, which may be juſtly reckoned the reproach of medicine. Women of a delicate habit, whoſe ſtomach and inteſtines are relaxed, and whoſe nervous ſyſtem is extremely ſenſible, are moſt ſubject to hyſteric complaints. In ſuch perſons an hyſteric fit, as it is called, may be brought on by an irritation of the nerves of the ſtomach or inteſtines, by wind, acrid humour, or the like. A ſudden ſuppreſſion of the menſes often gives riſe to hyſteric fits. They may likewiſe be excited by violent paſſions or affections of the mind, as fear, grief, anger, or great diſappointments.

CURE.---The radical cure of this diſorder will be beſt attempted at a time when the patient is moſt free from the fits. It will be greatly promoted by a proper attention to regimen. A milk and vegetable diet, duly perſiſted in, will often perform a cure. If, however, the patient has been accuſtomed to a more generous diet, it will not be ſafe to leave it off all at once, but by degrees. The moſt proper drink is water with a ſmall quantity of ſpirits. A cool dry air is the beſt. Cold bathing, and every thing that braces the nerves, and invigorates the ſyſtem, is beneficial: but lying too long in bed, or whatever relaxes the body, is hurtful. It is of the greateſt importance to have the mind kept conſtantly eaſy and cheerful, and, if poſſible, to have it always engaged in ſome agreeable and intereſting purſuit. The proper medicines are thoſe which ſtrengthen the alimentary canal and the whole nervous ſyſtem, as the preparations of iron, the Peruvian bark, and other bitters.

Twenty drops of the elixir of vitriol, in a cup of the infuſion of the bark, may be taken twice or thrice a-day. The chalybeate waters generally prove beneficial in this diſorder. Hyſteric women are often afflicted with cramps in various parts of the body, which are moſt apt to ſeize them in bed, or when aſleep. The moſt efficacious medicines in this caſe are opium, bliſtering-plaſters, and warm bathing or fomentations. When the cramp or ſpaſm is very violent, opium is the remedy moſt to be depended on. Cramps are often prevented or cured by compreſſion. Thus cramps in the legs are prevented, and ſometimes removed, by tight bandages; and, when convulſions ariſe from a flatulent diſtenſion of the inteſtines, or from ſpaſms beginning in them, they may be often leſſened or cured by making a pretty ſtrong compreſſion upon the abdomen by means of a broad belt. A roll of brimſtone held in the hand is frequently uſed as a remedy for cramps: though this ſeems to owe its effects chiefly to imagination, yet, as it ſometimes ſucceeds, it merits a trial. When ſpaſms or convulſive motions ariſe from ſharp humours in the ſtomach and inteſtines, no laſting relief can be procured till theſe are either corrected or expelled. The Peruvian bark has ſometimes cured periodic convulſions after other medicines have failed.

## OF HYPOCHONDRIAC COMPLAINTS.

THESE generally attack the indolent, the luxurious, the unfortunate, and the ſtudious; and are daily increaſed by luxury and ſedentary employments. Men of a melancholy temperament, whoſe minds are capable of great attention, and whoſe paſſions are not eaſily moved, are, in the advanced periods of life, moſt liable to this diſeaſe. It is uſually brought on by long and ſerious attention to abſtruſe ſubjects, grief, the ſuppreſſion of cuſtomary evacuations, exceſs of venery, the repulſion of cutaneous eruptions, long-continued evacuations, obſtructions in ſome of the viſcera, as the liver, ſpleen, &c.

CURE.---Cheerfulneſs and ſerenity of mind are by all means to be cultivated. Exerciſe of every kind is uſeful. The cold bath is likewiſe beneficial; and, where it does not agree with the patient, friction with the fleſh-bruſh or a coarſe cloth may be tried. If the patient has it in his power, he ought to travel either by ſea or land. A voyage, or a long journey, eſpecially towards a warmer climate, will be of more ſervice than any medicine. The general intentions of cure, in this diſeaſe, are to ſtrengthen the alimentary canal, and to promote the ſecretions. Theſe intentions will be beſt anſwered by the different preparations of iron and the Peruvian bark, which, after proper evacuations, may be taken in the ſame manner as directed in the preceding diſeaſe.

## OF A SCHIRRHUS AND CANCER.

A SCHIRRHUS is a hard indolent tumour ſeated in ſome of the glands, as the breaſts, the arm-pits, &c. If the tumour become large, unequal, of a livid, blackiſh, or leaden, colour, and is attended with violent pain, it gets the name of an occult cancer. When the ſkin is broken, and a *ſanies* or ichorous matter of an abominably fœtid ſmell is diſcharged from the ſore, it is called an open or ulcerated cancer. Perſons after the age of forty-five, particularly women, and thoſe who lead an indolent ſedentary life, are moſt ſubject to this diſeaſe. A cancer is often owing to ſuppreſſed evacuations; hence it proves ſo frequently fatal to women of a groſs habit, particulaly old maids and widows, about the time when the menſtrual flux ceaſes. It may alſo be occaſioned by the long-continued uſe of food that is too hard of digeſtion, or of an acrid nature; by barrenneſs, celibacy, indolence, cold, blows, friction, preſſure, or the like. Women often ſuffer from the laſt of theſe by means of their ſtays, which ſqueeze and compreſs their breaſts ſo as to occaſion great miſchief. This diſorder ſeems often very trifling at the beginning. A hard tumour about the ſize of a hazle-nut, or perhaps ſmaller, is generally the firſt ſymptom. This will often continue for a long time without ſeeming to increaſe, or giving the patient great uneaſineſs: but, if the conſtitution be hurt, or the tumour irritated by preſſure, or improper treatment of any kind, it begins to extend itſelf towards the neighbouring parts, by puſhing out a kind of roots or limbs. It then gets the name of *cancer*, from a fancied reſemblance between theſe limbs and the claws of a crab. The colour of the ſkin begins to change, which is firſt red, afterwards purple, then bluiſh, livid, and at laſt black. The patient complains of heat, with a burning, gnawing, ſhooting, pain. The tumour is very hard, rough, and unequal, with a protuberance, or riſing, in the middle; its ſize increaſes daily, and the neighbouring veins become thick, knotty, and of a blackiſh colour. The ſkin at length gives way, and a thin ſharp ichor begins to flow, which corrodes the neighbouring parts till it forms a large unſightly ulcer. More occult cancers ariſe, and communicate with the neighbouring glands. The pain and ſtench become intolerable; the appetite fails; the ſtrength is exhauſted by a continual hectic fever; at laſt, a violent hæmorrhage, or diſcharge of blood, from ſome part of the body, with faintings, or convulſion-fits, generally put an end to the miſerable patient's life.

CURE.---This is one of thoſe diſeaſes for which no certain remedy is yet known. Its progreſs however may ſometimes be retarded, and ſome of its moſt diſagreeable ſymptoms mitigated, by proper applications. One misfortune attending the diſeaſe is, that the unhappy patient often conceals it too long. Were proper means uſed in due time, a cancer might often be cured; but, after the diſorder has arrived at a certain height, it generally ſets all medicine at defiance. When a ſchirrhous tumour is firſt diſcovered, the patient ought to obſerve a proper regimen, and to take twice or thrice a-week a doſe of the common purging mercurial pill. Some blood may alſo be let, and the part affected may be gently rubbed twice a-day with a little of the mercurial ointment, and kept warm with fur or flannel. The food muſt be light, and an Engliſh pint of the decoction of ſarſaparilla may be drunk daily. Should the tumour not yield to this treatment, but, on the contrary, become larger and harder, it will be proper to extirpate it, either by the knife or cauſtic. Indeed, whenever this can be done with ſafety, the ſooner it is done the better. It can anſwer no purpoſe to extirpate a cancer after the conſtitution is ruined, or the whole maſs of humours corrupted, by it. This however is the common way, which makes the operation ſo ſeldom ſucceed. Few people will ſubmit to the extirpation till death ſtares them in the face; whereas, if it were done early, the patient's life would not be endangered by the operation, and it would generally prove a radical cure. The medicine moſt in repute for this diſeaſe is hemlock. Dr. Stork, phyſician at Vienna, has of late recommended the extract of this plant as very efficacious in cancers of every kind. The doctor ſays, he has given ſome hundred-weights of it without ever hurting any body, and often with manifeſt advantage. He adviſes the patient however to begin with very ſmall doſes, as two or three grains, and to increaſe the doſe gradually till ſome good effect be perceived, and there to reſt without further increaſe. From two or three grains at firſt, the doctor ſays he has increaſed the doſe to two, three, or four, drachms a-day, and finds that ſuch doſes may be continued for ſeveral weeks without any bad conſequences. The doctor does not pretend to fix the time in which a cancer may be reſolved by the uſe of hemlock, but ſays he has given it for above two years in large doſes without any apparent benefit; nevertheleſs the patient has been cured by perſiſting in the uſe of it for half a year longer. This is at leaſt encouragement to give it a fair trial. The powder of hemlock is by ſome preferred to the extract. They are both made of the freſh leaves, and may be uſed nearly in the ſame manner. Dr. Nicholſon, of Berwick, ſays, he gradually increaſed the doſe of the powder from a few grains to half a drachm, and gave near four drachms of it in the day with remarkably good effects. The hemlock may alſo be uſed externally either as a poultice or fomentation. The ſore may likewiſe be kept clean by injecting daily a ſtrong decoction of the tops and leaves into it. Few things contribute more to the healing of foul ſordid ulcers of any kind than keeping them thoroughly clean. This ought never to be neglected. The beſt application for this purpoſe ſeems to be the carrot poultice. The root of the common carrot may be grated, and moiſtened with as much water as will bring it to the conſiſtence of a poultice or cataplaſm. This muſt be applied to the ſore, and renewed twice a-day. It generally cleans the ſore, eaſes the pain, and takes away the diſagreeable ſmell, which are objects of no ſmall importance in ſuch a dreadful diſorder. Wort, or an infuſion of malt, has been recommended not only as a proper drink, but as a powerful medicine, in this diſeaſe. It muſt be frequently made freſh, and the patient may take it at pleaſure. Two, three, or even four, Engliſh pints of it may be drunk every day for a conſiderable time. No benefit can be expected from any medicine, in this diſeaſe, unleſs it be perſiſted in for a long time. It is of too obſtinate a nature to be ſoon removed; and, when it admits of a cure at all, it muſt be brought about by inducing an almoſt total change of the habit, which muſt always be a work of time. Setons or iſſues in the neighbourhood of the cancer have ſometimes good effects. When all other medicines fail, recourſe muſt be had to opium, as a kind of ſolace. This will not indeed cure the diſeaſe, but it will eaſe the patient's agony, and render life more tolerable while it continues. To avoid this dreadful diſorder, people ought to uſe wholeſome food, to take ſufficient exerciſe in the open air, and carefully to guard againſt all blows, bruiſes, and every kind of preſſure upon the breaſts or other glandular parts.

## OF POISONS.

EVERY perſon ought, in ſome meaſure, to be acquainted with the nature and cure of poiſons. They are generally taken unawares, and their effects are often ſo ſudden and violent, as not to admit of delay, or allow time to procure the aſſiſtance of phyſicians. Happily indeed no great degree of medical knowledge is here neceſſary; the remedies for moſt poiſons being generally at hand, or eaſily obtained, and nothing but common prudence needful in the application of them. The cure of all poiſons taken into the ſtomach, without exception, depends chiefly on diſcharging them as ſoon as poſſible. For this purpoſe the patient ſhould drink large quantities of new milk and ſallad-oil till he vomits; or he may drink warm water mixed with oil. Fat broths are likewiſe proper, provided they can be got ready in time. Where no oil is to be had, freſh butter may be melted and mixed with the milk or water. Theſe things are to be drunk as long as the inclination to vomit continues. Some have drunk eight or ten quarts before the vomiting ceaſed; and it is never ſafe to leave off drinking while one particle of the poiſon remains in the ſtomach. Theſe oily or fat ſubſtances not only provoke vomiting, but likewiſe blunt the acrimony of mineral poiſon, and prevent its wounding the bowels; but, if they ſhould not make the perſon vomit, half a drachm or two ſcruples of the powder of ipecacuanha muſt be given, or a few ſpoonfuls of the oxymel or vinegar of ſquills may be mixed with the water which he drinks. Vomiting may likewiſe be excited by tickling the inſide of the throat with a feather. Should theſe methods however fail, half a drachm of white vitriol, or five or ſix grains of emetic tartar, muſt be adminiſtered. If tormenting pains are felt in the lower belly, and there is reaſon to fear that the poiſon has got down to the inteſtines, clyſters of milk and oil muſt be very frequently thrown up; and the patient muſt drink emollient decoctions of barley, oatmeal, marſh-mallows, and ſuch-like. He muſt likewiſe take an infuſion of ſenna and manna, a ſolution of Glauber's ſalts, or ſome other purgative. After the poiſon has been evacuated, the patient ought, for ſome time, to live upon ſuch things as are of a healing and cooling quality; to abſtain from fleſh and all ſtrong liquors, and to live upon milk, broth, gruel, light puddings, and other ſpoonmeats, of eaſy digeſtion. His drink ſhould be barley-water, linſeed-tea, or infuſions of any of the mild mucilaginous vegetables. Though vegetable poiſons, when allowed to remain in the ſtomach, often prove fatal; yet the danger is generally over as ſoon as they are diſcharged. Not being of ſuch a cauſtic or corroſive nature, they are leſs apt to wound or inflame the bowels than mineral ſubſtances; no time, however, ought to be loſt in having them diſcharged. For the bites of poiſonous animals, a great variety of certain and immediate cures are pointed out in the Herbal. For the bite of a viper, however, the wound ſhould be well ſucked, and afterwards rubbed with warm ſallad-oil. A poultice of bread and milk, ſoftened with ſallad-oil, ſhould likewiſe be applied to the wound; and the patient ought to drink freely of vinegar-whey, or water-gruel with vinegar in it, to make him ſweat. Vinegar is one of the beſt drinks which can be uſed in any kind of poiſon, and ought to be taken very liberally. If the patient be ſick, he may take a vomit. This courſe will be ſufficient to cure the bite of any of the poiſonous animals of this country. It is the happineſs of this iſland to have very few poiſonous animals, and thoſe which we have are by no means of the moſt virulent kind. We cannot however make the ſame obſervation with regard to poiſonous vegetables: theſe abound every where, and prove often fatal to the ignorant and unwary. This indeed is chiefly owing to careleſſneſs. Children ought early to be cautioned againſt eating any kind of fruit, roots, or berries, which they do not know; and all poiſonous plants to which they can have acceſs, ought, as far as poſſible, to be deſtroyed. This would not be ſo difficult a taſk as ſome people imagine, were this Herbal kept in all families, and their children made to read leſſons from it, as an eaſy occaſional taſk. This, I think, will appear an indiſpenſible duty in parents, when we reflect, that ſeldom a year paſſes but we have accounts of ſeveral perſons poiſoned by eating hemlock-roots inſtead of parſnips, or ſome kinds of fungus which they had gathered for muſhrooms. Theſe examples ought to put people upon their guard with reſpect to the former, and put the latter entirely out of uſe. We might here mention many other plants and animals of a poiſonous nature which are found in foreign countries; but, as our obſervations are chiefly intended for this iſland, we ſhall paſs theſe over. It may not however be amiſs to obſerve, for the behoof of ſuch of our countrymen as go to America, that an effectual remedy is now ſaid to be found for the bite of the rattle-ſnake.---The preſcription is as follows: Take of the roots of plantain and hoarhound, in ſummer, roots and branches together, a ſufficient quantity; bruiſe them in a mortar, and ſqueeze out the juice, of which give, as ſoon as poſſible, one large ſpoonful; if the patient be ſwelled, you muſt force it down his throat. This generally will cure; but, if he finds no relief in an hour after, you may give another ſpoonful, which never fails.---If the roots are dried, they muſt be moiſtened with a little water. To the wound may be applied a leaf of good tobacco moiſtened with rum. We give this upon the faith of Dr. Brookes, who ſays it was the invention of a negro; for the diſcovery of which he had his freedom purchaſed, and a hundred pounds per annum ſettled upon him during life, by the General Aſſembly of Carolina.

## OF INFLAMMATIONS AND ABSCESSES.

FROM whatever cauſe an inflammation proceeds, it muſt terminate either by diſperſion, ſuppuration, or gangrene. Though it is impoſſible to foretel with certainty in which of theſe ways any particular inflammation will terminate, yet a probable conjecture may be formed with regard to the event, from a knowledge of the patient's age and conſtitution. Inflammations happening in a ſlight degree upon colds, and without any previous indiſpoſition, will moſt probably be diſperſed; thoſe which follow cloſe upon a fever, or happen to perſons of a groſs habit of body, will generally ſuppurate; and thoſe which attack very old people, or perſons of a dropſical habit, will have a ſtrong tendency to gangrene.

CURE.---If the inflammation be ſlight, and the conſtitution ſound, the diſperſion ought always to be attempted. This will be beſt promoted by a ſlender diluting diet, plentiful bleeding, and repeated purges. The part itſelf muſt be fomented, and, if the ſkin be very tenſe, it may be embrocated with a mixture of three-fourths of ſweet oil, and one-fourth of vinegar, and afterwards covered with a piece of wax plaiſter. If, notwithſtanding theſe applications, the ſymptomatic fever increaſes, and the tumour becomes larger, with violent pain and pulſation, it will be proper to promote the ſuppuration. The beſt application for this purpoſe is a ſoft poultice, which may be renewed twice a-day. If the ſuppuration proceeds but ſlowly, a raw onion cut ſmall or bruiſed may be ſpread upon the poultice. When the abſceſs is ripe or fit for opening, which may eaſily be known from the thinneſs of the ſkin in the moſt prominent part of it, a fluctuation of matter which may be felt under the finger, and, generally ſpeaking, an abatement of the pain, it may be opened either with a lancet or by means of a cauſtic. The laſt way in which an inflammation terminates is in a gangrene or mortification, the approach of which may be known by the following ſymptoms: The inflammation loſes its redneſs, and becomes duſkiſh or livid; the tenſion of the ſkin goes off, and it feels flabby; little bladders filled with ichor of different colours ſpread all over it; the tumour ſubſides, and from a duſkiſh complexion becomes black; a quick low pulſe, with cold clammy ſweats, are the immediate forerunners of death. When theſe ſymptoms firſt appear, the part ought to be dreſſed with London treacle, or a cataplaſm made of lixivium and bran; ſhould the ſymptoms become worſe, that part muſt be ſcarified, and afterwards dreſſed with baſilicon ſoftened with oil of turpentine. All the dreſſings muſt be applied warm. With regard to internal medicines, the patient muſt be ſupported with generous cordials, and the Peruvian bark exhibited in as large doſes as the ſtomach will bear it. If the mortified parts ſhould ſeparate, the wound will become a common ulcer, and muſt be treated accordingly. This article includes the treatment of all thoſe diſeaſes, which, in different parts of the country, go by the name of biles, impoſthumes, whitloes, &c. They are all abſceſſes in conſequence of a previous inflammation, which, if poſſible, ought to be diſcuſſed, but, when this cannot be done, the ſuppuration ſhould be promoted, and the matter diſcharged by an inciſion, if neceſſary; afterwards the ſore may be dreſſed with yellow baſilicon, or ſome other digeſtive ointment.

## OF WOUNDS.

NO part of medicine has been more miſtaken than the treatment or cure of wounds. It is however a fact, that no external application whatever contributes towards the cure of a wound, any other way than by keeping the parts ſoft, clean, and defending them from the external air, which may be as effectually done by dry lint as by the moſt pompous applications, while it is exempt from many of the bad conſequences attending them. The ſame obſervation holds with reſpect to internal applications. Theſe only promote the cure of wounds as far as they tend to prevent a fever, or to remove any cauſe that might obſtruct or impede the operations of nature. It is nature alone that cure wounds; all that art can do is to remove obſtacles, and to put the parts in ſuch a condition as is the moſt favourable to nature's efforts.

CURE.---The firſt thing to be done, when a perſon has received a wound, is to examine whether any foreign body be lodged in it, as wood, ſtone, iron, lead, glaſs, dirt, bits of cloth, or the like. Theſe, if poſſible, ought to be extracted, and the wound cleaned, before any dreſſings be applied. When that cannot be effected with ſafety, on account of the patient's weakneſs, or loſs of blood, they muſt be ſuffered to remain in the wound, and afterwards extracted when he is more able to bear it. When a wound penetrates into any of the cavities of the body, as the breaſt, the bowels, &c. or where any conſiderable blood-veſſel is cut, a ſkilful ſurgeon ought immediately to be called, otherwiſe the patient may loſe his lfe. But ſometimes the diſcharge of blood is ſo great, that, if it be not ſtopped, the patient may die, even before a ſurgeon, though at no great diſtance, can arrive. In this caſe, ſomething muſt be done by thoſe who are preſent. If the wound be in any of the limbs, the bleeding may generally be ſtopped, by applying a tight ligature or bandage round the member a little above the wound, In parts where this bandage cannot be applied, various other methods may be tried to ſtop the bleeding, as the application of ſtyptics, aſtringents, &c. Cloths dipped in a ſolution of blue vitriol in water, or the ſtyptic water of the diſpenſatories, may be applied to the wound. When theſe cannot be obtained, ſtrong ſpirits of wine may be uſed. Some recommend the agaric of the oak as preferable to any of the other ſtyptics; and indeed it deſerves conſiderable encomiums. It is eaſily obtained, and ought to be kept in every family, in caſe of accidents. A piece of it muſt be laid upon the wound, and covered with a good deal of lint, above which a bandage may be applied ſo tight as to keep it firmly on. Though ſpirits, tinctures, and hot balſams, may be uſed, in order to ſtop the bleeding when it is exceſſive, they are improper at other times. They do not promote but retard the cure, and often change a ſimple wound into an ulcer. People imagine, becauſe hot balſams congeal the blood, and ſeem, as it were, to ſolder up the wound, that they therefore heal it; but this is only a deception. They may indeed ſtop the flowing blood, by ſearing the mouths of the veſſels; but, by rendering the parts callous, they obſtruct the cure. When a wound is greatly inflamed, the moſt proper application is a poultice of bread and milk, ſoftened with a little ſweet oil or freſh butter. This muſt be applied inſtead of a plaiſter, and ſhould be changed twice a-day. If the wound be large, and there is reaſon to fear an inflammation, the patient ſhould be kept on a very low diet. He muſt abſtain from fleſh, ſtrong liquors, and every thing that is of a heating nature. If he be of a full habit, and has loſt but little blood from the wound, he muſt be bled; and, if the ſymptoms be urgent, the operation may be repeated. But, when the patient has been greatly weakened by loſs of blood from the wound, it will be dangerous to bleed him, even though a fever ſhould enſue. Nature ſhould never be too far exhauſted: it is always more ſafe to allow her to ſtruggle with the diſeaſe in her own way than to ſink the patient's ſtrength by exceſſive evacuations.

## OF BURNS.

IN ſlight burns which do not break the ſkin, it is cuſtomary to hold the part near the fire for a competent time, to rub it with ſalt, or to lay a compreſs upon it dipped in ſpirits of wine or brandy. But, when the burn has penetrated ſo deep as to bliſter or break the ſkin, it muſt be dreſſed with ſome of the liniments for burns, or with the emollient and gently-drying ointment, commonly called Turner's cerate. This may be mixed with an equal quantity of freſh olive-oil, and ſpread upon a ſoft rag, and applied to the part affected. When this ointment cannot be had, an egg may be beat up with about an equal quantity of the ſweeteſt ſallad-oil. This will ſerve very well till a proper ointment can be prepared. When the burning is very deep, after the firſt two or three days, it ſhould be dreſſed with equal parts of yellow baſilicon and Turner's cerate mixed together. When the burn is violent, or has occaſioned a high degree of inflammation, and there is reaſon to fear a gangrene or mortification, the ſame means muſt be uſed to prevent it as are recommended in other violent inflammations. The patient, in this caſe, muſt live low, and drink freely of weak diluting liquors. He muſt likewiſe be bled, and have his body kept open. But, if the burnt parts ſhould become livid or black, with other ſymptoms of mortification, it will be neceſſary to bathe them frequently with warm camphorated ſpirits of wine, tincture of myrrh, or other antiſeptics, mixed with a decoction of the bark. In this caſe the bark muſt likewiſe be taken internally, and the patient's diet muſt be more generous.

## OF BRUISES.

IN ſlight bruiſes it will be ſufficient to bathe the part with warm vinegar, to which a little brandy or rum may occaſionally be added, and to keep cloths wet with this mixture conſtantly applied to it. This is more proper than rubbing it with brandy, ſpirits of wine, or other ardent ſpirits, which are commonly uſed in ſuch caſes. In ſome parts of the country the peaſants apply to a recent bruiſe a cataplaſm of freſh cow-dung. I have often ſeen this cataplaſm applied to violent contuſions occaſioned by blows, falls, bruiſes, and ſuch-like, and never knew it fail to have a good effect. When a bruiſe is very violent, the patient ought immediately to be bled, and put upon a proper regimen. His food ſhould be light and cool, and his drink weak, and of an opening nature; as whey ſweetened with honey, decoctions of tamarinds, barley, cream-tartar whey, and ſuch-like. The bruiſed part muſt be bathed with vinegar and water, as directed above; and a poultice, made by boiling of crumb of bread, elder-flowers, and camomile-flowers, in equal quantities of vinegar and water, applied to it. This poultice is peculiarly proper when a wound is joined to the bruiſe. It may be renewed two or three times a-day. As the ſtructure of the veſſels is totally deſtroyed by a violent bruiſe, there often enſues a great loſs of ſubſtance, which produces an ulcerous ſore, very difficult to cure. If the bone be affected, the ſore will not heal before an exfoliation takes place; that is, before the diſeaſed part of the bone ſeparates, and comes out through the wound. This is often a very ſlow operation, and may even require ſeveral years to be completed. Hence it happens, that theſe ſores are frequently miſtaken for the king's evil, and treated as ſuch, though, in fact, they proceed ſolely from the injury which the ſolid parts received from the blow. Patients in this ſituation are peſtered with different advices. Every one who ſees them propoſes a new remedy, till the ſore is ſo much irritated with various and oppoſite applications, that it is often at length rendered abſolutely incurable. The beſt method of managing ſuch ſores is, to take care that the patient's conſtitution does not ſuffer by confinement or improper medicine, and to apply nothing to them but ſome ſimple ointment ſpread upon ſoft lint, over which a poultice of bread and milk, with boiled camomile-flowers, or the like, may be put, to nouriſh the part, and keep it ſoft and warm. Nature, thus aſſiſted, will generally in time operate a cure, by throwing off the diſeaſed parts of the bone, after which the ſore ſoon heals.

## OF ULCERS.

ULCERS may be the conſequence of wounds, bruiſes, or impoſthumes, improperly treated; they may likewiſe proceed from an ill ſtate of the humours, or what may be called a bad habit of body. In the latter caſe, they ought not to be haſtily dried up, otherwiſe it may prove fatal to the patient. Ulcers happen moſt commonly in the decline of life; and perſons who neglect exerciſe, and live groſsly, are moſt liable to them. They might often be prevented by retrenching ſome part of the ſolid food, or by opening artificial drains, as iſſues, ſetons, or the like. It requires conſiderable ſkill to be able to judge whether or not an ulcer ought to be dried up. In general, all ulcers which proceed from a bad habit of body ſhould be ſuffered to continue open, at leaſt till the conſtitution has been ſo far changed by proper regimen, or the uſe of medicine, that they ſeem diſpoſed to heal of their own accord. Ulcers, which are the effect of malignant fevers, or other acute diſeaſes, may generally be healed with ſafety after the health has been reſtored for ſome time. The cure ought not, however, to be attempted too ſoon, nor at any time without the uſe of purging medicines and a proper regimen. When wounds or bruiſes have, by wrong treatment, degenerated into ulcers, if the conſtitution be good, they may generally be healed with ſafety. When ulcers either accompany chronical diſeaſes, or come in their ſtead, they muſt be cautiouſly healed. If an ulcer conduces to the patient's health, from whatever cauſe it proceeds, it ought not to be healed; but if, on the contrary, it waſtes the ſtrength, and conſumes the patient by a ſlow fever, it ſhould be healed as ſoon as poſſible. We would earneſtly recommend a ſtrict attention to theſe particulars, to all who have the misfortune to labour under this diſorder, particularly perſons in the decline of life; as we have frequently known people throw away their lives by the want of it, while they were extolling and generouſly rewarding thoſe whom they ought to have looked upon as their executioners. The moſt proper regimen for promoting the cure of ulcers is to avoid all ſpices, ſalted and high-ſeaſoned food, all ſtrong liquors, and to leſſen the uſual quantity of fleſh meat. The body ought to be kept gently open by a diet conſiſting chiefly of cooling laxative vegetables, and by drinking butter-milk, whey ſweetened with honey, or the like. A fiſtulous ulcer can ſeldom be cured without an operation. It muſt either be laid open ſo as to have its callous parts deſtroyed by ſome corroſive application, or they muſt be entirely cut away by the knife: but, as this operation requires the hand of an expert ſurgeon, there is no occaſion to deſcribe it. Ulcers about the *anus* are moſt apt to become fiſtulous, and are very difficult to cure. Some, indeed, pretend to have found Ward's fiſtula-paſte very ſuccesſful in this complaint. It is not a dangerous medicine, and, being eaſily procured, it may deſerve a trial; but, as theſe ulcers generally proceed from an ill habit of body, they will ſeldom yield to any thing except a long courſe of regimen, aſſiſted by medicines, which are calculated to correct that particular habit, and to induce an almoſt total change in the conſtitution.

## OF DISLOCATIONS.

WHEN a bone is moved out of its place or articulation, ſo as to impede its proper functions, it is ſaid to be luxated or diſlocated. As this often happens to perſons in ſituations where no medical aſſiſtance can be obtained, by which means limbs, and even lives, are frequently loſt, we ſhall endeavour to point out the method of reducing the moſt common luxations, and thoſe which require immediate aſſiſtance. Any perſon of common ſenſe and reſolution, who is preſent when a diſlocation happens, may often be of more ſervice to the patient than the moſt expert ſurgeon can after the ſwelling and inflammation have come on. When theſe are preſent, it is difficult to know the ſtate of the joint, and dangerous to attempt a reduction; and, by waiting till they are gone off, the muſcles become ſo relaxed, and the cavity filled up, that the bone can never afterwards be retained in its place. A recent diſlocation may generally be reduced by extenſion alone, which muſt always be greater or leſs according to the ſtrength of the muſcles which move the joint, the age, robuſtneſs, and other circumſtances, of the patient. When the bone has been out of its place for any conſiderable time, and a ſwelling or inflammation has come on, it will be neceſſary to bleed the patient, and, after fomenting the part, to apply ſoft poultices with vinegar to it for ſome time before the reduction is attempted. All that is neceſſary after the reduction, is to apply cloths dipped in vinegar or camphorated ſpirits of wine to the part, and to keep it perfectly eaſy. Many bad conſequences proceed from the neglect of this rule. A diſlocation ſeldom happens without the tendons and ligaments of the joint being ſtretched and ſometimes torn. When theſe are kept eaſy till they recover their ſtrength and tone, all goes on very well; but, if the injury be increaſed by too frequent an exertion of the parts, no wonder if they be found weak and diſeaſed ever after.

Dislocation of the Jaw.---The uſual method of reducing a diſlocated jaw, is to ſet the patient upon a low ſtool, ſo as an aſſiſtant may hold the head firm by preſſing it againſt his breaſt. The operator is then to thruſt his two thumbs, being firſt wrapped up with linen cloths that they may not ſlip, as far back into the patient's mouth as he can, while his fingers are applied to the jaw externally. After he has got firm hold of the jaw, he is to preſs it ſtrongly downwards and backwards, by which means the elapſed heads of the jaw may be eaſily puſhed into their former cavities. The peaſants, in ſome parts of the country, have a peculiar way of performing this operation. One of them puts a kandkerchief under the patient's chin, then, turning his back to that of the patient, pulls him up by the chin ſo as to ſuſpend him from the ground. This method often ſucceeds, but we think it a dangerous one, and therefore recommend the former.

Dislocation of the Neck.---The neck may be diſlocated by falls, violent blows, or the like. In this caſe, if the patient receives no aſſiſtance, he ſoon dies, which makes people imagine the neck was broken; it is, however, for the moſt part, only partially diſlocated, and may be reduced by almoſt any perſon who has reſolution enough to attempt it. A complete diſlocation of the neck is inſtantaneous death. When the neck is diſlocated, the patient is immediately deprived of all ſenſe and motion; his neck ſwells, his countenance appears bloated, his chin lies upon his breaſt, and his face is generally turned towards one ſide. To reduce this diſlocation, the unhappy perſon ſhould immediately be laid upon his back on the ground, and the operator muſt place himſelf behind him ſo as to be able to lay hold of his head with both hands, while he makes a reſiſtance by placing his knees againſt the patient's ſhoulders. In this poſture he muſt pull the head with conſiderable force, gently twiſting it at the ſame time, if the face be turned to one ſide, till he perceives that the joint is replaced, which may be known from the noiſe which the bones generally make when going in, the patient's beginning to breathe, and the head continuing in its natural poſture. After the neck is reduced, the patient

tient ought to be bled, and ſhould be ſuffered to reſt for ſome days, till the parts recover their proper tone.

Dislocation of the Shoulder.---The humerus or upper bone of the arm may be diſlocated in various directions: it happens however moſt frequently downwards, but very ſeldom directly upwards. From the nature of its articulation, as well as from its expoſure to external injuries, this bone is the moſt ſubject to diſlocation of any in the body. A diſlocation of the humerus may be known by a depreſſion or cavity on the top of the ſhoulder, and an inability to move the arm. When the diſlocation is downward or forward, the arm is elongated, aud a ball or lump is perceived under the arm pit; but, when it is backward, there appears a protuberance behind the ſhoulder, and the arm is thrown forwards toward the breaſt. The uſual method of reducing diſlocations of the ſhoulder is to ſeat the patient upon a low ſtool, and to cauſe an aſſiſtant to hold his body ſo that it may not give way to the extenſion, while another lays hold of the arm a little above the elbow, and gradually extends it. The operator then puts a napkin under the patient's arm, and cauſes it to be tied behind his own neck; by this, while a ſufficient extenſion is made, he lifts up the head of the bone, and with his hands directs it into its proper place. There are various machines invented for facilitating this operation, but the hand of an expert ſurgeon is always more ſafe. In young and delicate patients, it is a very eaſy matter to reduce the ſhoulder by extending the arm with one hand, thruſting in the head of the bone with the other. In making the extenſion, the arm ought always to be a little bent.

Dislocation of the Elbow.---The bones of the fore-arm may be diſlocated in any direction. When this is the caſe, a protuberance may be obſerved on that ſide of the arm towards which the bone is puſhed, from which, and the patient's inability to bend his arm, a diſlocation of this joint may eaſily be known. Two aſſiſtants are generally neceſſary for reducing a diſlocation of the elbow; one of them muſt lay hold of the arm above, and the other below, the joint, and make a pretty ſtrong extenſion, while the operator returns the bones into their proper place. Afterwards the arm muſt be bent and ſuſpended for ſome time with a ſling about the neck. Luxations of the wriſt and fingers are to be reduced in the ſame manner as thoſe of the elbow, viz. by making an extenſion in different directions, and thruſting the head of the bone into its plate.

Dislocation of thf Thigh.---When the thigh-bone is diſlocated forward and downward, the knee and foot are turned out, and the leg is longer than the other; but, when it is diſplaced backward, it is uſually puſhed upward at the ſame time, by which means the limb is ſhortened, and the foot is turned inwards. When the thigh-bone is diſplaced forward and downward, the patient, in order to have it reduced, muſt be laid upon his back, and made faſt by bandages, or held by aſſiſtants, while by others an extenſion is made by means of ſlings fixed about the bottom of the thigh a little above the knee. While the extenſion is made, the operator muſt puſh the head of the bone outward, till it gets into the ſocket. If the diſlocation be outward, the patient muſt be laid upon his face, and, during the extenſion, the head of the bone muſt be puſhed inward. Diſlocations of the knees, ancles, and toes, are reduced much in the ſame manner as thoſe of the upper extremities, viz. by making an extenſion in oppoſite directions, while the operator replaces the bones. In many caſes, however, the extenſion alone is ſufficient, and the bone will ſlip into its place merely by pulling the limb with ſufficient force. It is not hereby meant, that force alone is ſufficient for the reduction of diſlocations.

## OF BROKEN BONES, &c.

THERE is, in moſt country villages, ſome perſons who pretend to the art of reducing fractures. Though, in general, ſuch perſons are very ignorant, yet ſome of them are very ſucceſsful; which evidently proves, that a ſmall degree of learning, with a ſufficient ſhare of common ſenſe, and a mechanical head, will enable a man to be uſeful in this way. We would, however, adviſe people never to employ ſuch operators when an expert and ſkilful ſurgeon can be had; but, when that is impracticable, they muſt be employed: we ſhall therefore recommend the following hints to their conſideration: when a large bone is broken, the patient's diet ought, in all reſpects, to be the ſame as in an inflammatory fever. He ſhould likewiſe be kept quiet and cool, and his body open by emollient clyſters, or, if theſe cannot be conveniently adminiſtered, by food that is of an opening quality; as ſtewed prunes, apples boiled in milk, boiled ſpinage, and the like. It ought however to be here remarked, that perſons who have been accuſtomed to live high are not all of a ſudden to be reduced to a very low diet. This might have fatal effects. There is often a neceſſity for indulging even bad habits, in ſome meaſure, where the nature of the diſeaſe might require a different treatment. It will be generally neceſſary to bleed the patient immediately after a fracture, eſpecially if he be young, of a full habit, or has, at the ſame time, received any bruiſe or contuſion. This operation ſhould not only be performed ſoon after the accident happens, but, if the patient be very feveriſh, it may be repeated next day. When ſeveral of the ribs are broken, bleeding is peculiarly neceſſary. If any of the large bones which ſupport the body are broken, the patient muſt keep his bed for ſeveral weeks. It is by no means neceſſary, however, that he ſhould lie all that time, as is cuſtomary, upon his back. This ſituation ſinks the ſpirits, galls and frets the patient's ſkin, and renders him very uneaſy. After the ſecond week he may be gently raiſed up, and may ſit ſeveral

hours,

hours, ſupported by a bed-chair, or the like, which will greatly relieve him. Great care, however, muſt be taken in raiſing him up, and laying him down, that he make no exertions himſelf, otherwiſe the action of the muſcles may pull the bone out of its place. It has been cuſtomary, when a bone was broken, to keep the limb for five or ſix weeks continually upon the ſtretch. But this is a bad poſture. It is both uneaſy to the patient and unfavourable to the cure. The beſt ſituation is to keep the limb a little bent. This is the poſture into which every animal puts its limbs when it goes to reſt, and in which feweſt muſcles are upon the ſtretch. It is eaſily effected, by either laying the patient upon his ſide, or making the bed ſo as to favour this poſition of the limb. All that art can do towards the cure of a broken bone, is to lay it perfectly ſtraight, and to keep it quite eaſy. All tight bandages do hurt. They had much better be wanting altogether. A great many of the bad conſequences which ſucceed to fractured bones are owing to tight bandages. The beſt method of retention is by two or more ſplints made of leather or paſteboard. Theſe, if moiſtened before they be applied, ſoon aſſume the ſhape of the included member, and are ſufficient, by the aſſiſtance of a very ſlight bandage, for all the purpoſes of retention. The ſplints ſhould always be as long as the limb, with holes cut for the ancles when the fracture is in the leg. In fractures of the ribs, where a bandage cannot be properly uſed, an adheſive plaiſter may be applied over the part. The patient, in this caſe, ought to keep himſelf quite eaſy, avoiding every thing that may occaſion ſneezing, laughing, coughing, or the like. He ought to keep his body in a ſtraight poſture, and ſhould take care that his ſtomach be conſtantly diſtended, by taking frequently ſome light food, and drinking freely of weak watery liquors. The moſt proper external application for a fracture is *oxycrate*, or a mixture of vinegar and water. The bandages ſhould be wet with this at every dreſſing.

## OF STRAINS.

STRAINS are often attended with worſe conſequences than broken bones. The reaſon is obvious, they are generally neglected. When a bone is broken, the patient is obliged to keep the member eaſy, becauſe he cannot make uſe of it; but, when a joint is only ſtrained, the perſon, finding he ſtill can make a ſhift to move it, is ſorry to loſe his time for ſo trifling an ailment. In this way he deceives himſelf, and converts into an incurable malady what might have been removed by only keeping the part eaſy for a few days. Country people generally immerſe a ſtrained limb in cold water. This is very proper, provided it be done immediately, and not kept in too long. But the cuſtom of keeping the part immerſed in cold water for a long time, is certainly dangerous. It relaxes inſtead of bracing the part, and is more likely to produce a diſeaſe than remove one. Wrapping a garter, or ſome other bandage, pretty tight about the ſtrained part, is likewiſe of uſe. It helps to reſtore the proper tone of the veſſels, and prevents the action of the parts from increaſing the diſeaſe. It ſhould not however be applied too tight. Bleeding near the affected part will frequently have a very good effect: but what we would recommend above all is eaſe. It is more to be depended on than any medicine, and ſeldom fails to remove the complaint.

## OF RUPTURES.

CHILDREN and very old people are moſt liable to this diſeaſe. In the former, it is generally occaſioned by exceſſive crying, coughing, vomiting, or the like. In the latter, it is commonly the effect of blows or violent exertions of the ſtrength, as leaping, carrying great weights, &c. In both, a relaxed habit, indolence, and an oily or very moiſt diet, diſpoſe the body to this diſeaſe. A rupture ſometimes proves fatal before it is diſcovered. Whenever ſickneſs, vomiting, and obſtinate coſtiveneſs, gives reaſon to ſuſpect an obſtruction of the bowels, all thoſe places where ruptures uſually happen ought carefully to be examined. The protruſion of a very ſmall part of the gut will occaſion all theſe ſymptoms; and, if not returned in due time, will prove mortal. On the firſt appearance of a rupture in an infant, it ought to be laid upon its back, with its head very low. While in this poſture, if the gut does not return of itſelf, it may eaſily be put up by gentle preſſure. After it is returned, a piece of ſticking-plaiſter may be applied over the part, and a proper truſs or bandage muſt be conſtantly worn for a conſiderable time. The method of making and applying theſe rupture-bandages for children is pretty well known. The child muſt, as far as poſſible, be kept from crying, and from all violent motion, till the rupture is quite healed. In adults, when the gut has been forced down with great violence, or happens from any cauſe to be inflamed, there is often great difficulty in returning it. The patient ſhould be bled; after which, he muſt be laid upon his back, with his head very low, and his breech raiſed high with pillows. In this ſituation flannel cloths wrung out of a decoction of mallows and camomile-flowers, or, if theſe are not at hand, of warm water, muſt be applied for a conſiderable time. A clyſter made of this decoction, with a large ſpoonful of butter and a little ſalt, may be afterwards thrown up. If theſe ſhould not prove ſucceſsful, recourſe muſt be had to preſſure. If the tumour be very hard, conſiderable force will be neceſſary; but it is not force alone which ſucceeds here. The operator, at the ſame time that he makes a preſſure with the palms of his hands, muſt with his fingers artfully conduct the gut in by the ſame aperture through which it came out. The manner of doing this can be much eaſier conceived than deſcribed. Should theſe endeavours prove ineffectual, clyſters of the ſmoke of tobacco may be tried. Theſe have been often known to ſucceed where every other method failed. An adult, after the gut has been returned, muſt wear a ſteel bandage. It is needleſs to deſcribe this, as it may always be had ready-made from the artiſts. Such bandages are generally irkſome to the wearer for ſome time, but by cuſtom they become quite eaſy. No perſon who has had a rupture after he arrived at man's eſtate ſhould ever be without one of theſe bandages. Perſons who have a rupture ought carefully to avoid all violent exerciſe, carrying great weights, leaping, running, and the like. They ſhould likewiſe avoid windy aliment and ſtrong liquors; and ſhould carefully guard againſt catching cold.

## OF RECOVERING DROWNED PERSONS.

WHEN a perſon has remained above a quarter of an hour under water, there can be no conſiderable hopes of recovery. But, as ſeveral circumſtances may happen to have continued life, in ſuch an unfortunate ſituation, beyond the ordinary term, we ſhould never too ſoon reſign the unhappy object to his fate, but try every method for his relief, as there are many well-atteſted proofs of the recovery of perſons to life and health who had been taken out of the water apparently dead, and who remained a conſiderable time without exhibiting any ſigns of life. The firſt thing to be done, after the body is taken out of the water, is to convey it, as ſoon as poſſible, to ſome convenient place, where the neceſſary operations for its recovery may be performed. In attempting to recover perſons apparently drowned, the principal intention to be purſued is, to reſtore the natural warmth, upon which all the vital functions depend; and to excite theſe functions by the application of ſtimulants, not only to the ſkin, but likewiſe to the lungs, inteſtines, &c. Though cold was by no means the cauſe of the perſon's death, yet it will prove an effectual obſtacle to his recovery. For this reaſon, after ſtripping him of his wet clothes, his body muſt be ſtrongly rubbed for a conſiderable time with coarſe linen cloths, as warm as they can be made; and, as ſoon as a well-heated bed can be got ready, he may be laid in it, and the rubbing ſhould be continued. Warm cloths ought likewiſe to be frequently applied to the ſtomach and bowels, and hot bricks, or bottles of warm water, to the ſoles of the feet and to the palms of the hands. Strong volatile ſpirits ſhould be frequently applied to the noſe; and the ſpine of the back and pit of the ſtomach may be rubbed with warm brandy or ſpirit of wine. The temples ought always to be chafed with volatile ſpirits; and ſtimulating powders, as that of tobacco or marjoram, may be blown up the noſtrils. To renew the breathing, a ſtrong perſon may blow his own breath into the patient's mouth with all the force he can, holding his noſtrils at the ſame time. When it can be perceived, by the riſing of the cheſt or belly, that the lungs are filled with air, the perſon ought to deſiſt from blowing, and ſhould preſs the breaſt and belly ſo as to expel the air again; and this operation may be repeated for ſome time, alternately inflating and depreſſing the lungs ſo as to imitate natural reſpiration. If the lungs cannot be inflated in this manner, it may be attempted by blowing through one of the noſtrils, and at the ſame time keeping the other cloſe. When air cannot be forced into the cheſt by the mouth or noſe, it may be neceſſary to make an opening into the wind-pipe for this purpoſe. It is needleſs, however, to ſpend time in deſcribing this operation, as it ſhould not be attempted unleſs by perſons ſkilled in ſurgery. To ſtimulate the inteſtines, the fume of tobacco may be thrown up in form of a clyſter. There are various pieces of apparatus contrived for this purpoſe, which may be uſed when at hand; but where theſe cannot be obtained, the buſineſs may be done by a common tobacco-pipe. The bowl of the pipe muſt be filled with tobacco well kindled, and, after the ſmall tube has been introduced into the fundament, the ſmoke may be forced up by blowing through a piece of paper full of holes wrapped round the mouth of the pipe, or by blowing through an empty pipe, the mouth of which is applied cloſe to that of the other. While theſe things are doing, ſome of the attendants ought to be preparing a warm bath, into which the perſon ſhould be put, if the above endeavours prove ineffectual. Where there are no conveniencies for uſing the warm bath, the body may be covered with warm ſalt, ſand, aſhes, grains, or ſuch-like. Tiſſot mentions an inſtance of a girl who was reſtored to life, after ſhe had been taken out of the water, ſwelled, bloated, and to all appearance dead, by laying her naked body upon hot aſhes, covering her with others equally hot, putting a bonnet round her head and a ſtocking round her neck ſtuffed with the ſame, and heaping coverings over all. After ſhe had remained half an hour in this ſituation, her pulſe returned, ſhe recovered ſpeech, and cried out, I freeze, I freeze! A little cherry-brandy was given her, and ſhe remained buried as it were under the aſhes for eight hours; afterwards ſhe was taken out, without any other complaint except that of laſſitude or wearineſs, which went off in a few days. The doctor mentions likewiſe an inſtance of a man who was reſtored to life after he had remained ſix hours under water, by the heat of a dunghill. Till the patient ſhews ſome ſigns of life, and is able to ſwallow, it would be uſeleſs and even dangerous to pour liquors into his mouth. His lips, however, and tongue, may be frequently wet with a feather dipped in warm brandy, or other ſtrong ſpirits; and, as ſoon as he has recovered the power of ſwallowing, a little warm wine, or ſome other cordial, ought every now and then to be adminiſtered. We are by no means to diſcontinue our aſſiſtance, as ſoon as the patients diſcover ſome tokens of life, ſince they ſometimes expire after theſe firſt appearances of recovering. The warm and ſtimulating applications are ſtill to be continued, and ſmall quantities of ſome cordial ought frequently to be adminiſtered. Laſtly, though the perſon ſhould be manifeſtly re-animated, there ſometimes remain an oppreſſion, a cough, and feveriſhneſs, which effectually conſtitute a diſeaſe. In this caſe, it will be neceſſary to bleed the patient in the arm, and to cauſe him to drink plentifully of barley-water, elder-flower tea, or any other ſoft pectoral infuſions. Such perſons as have the misfortune to be deprived of the appearance of life by a fall, a blow, ſuffocation, or the like, muſt be treated nearly in the ſame manner as thoſe who have been for ſome time under water.

## OF CONVULSION FITS.

CONVULSION fits often conſtitute the laſt ſcence of acute or chronic diſorders. When this is the caſe, there can remain but ſmall hopes of the patient's recovery after expiring in a fit. But when a perſon, who appears to be in perfect health, is ſuddenly ſeized with a convulſion fit, and ſeems to expire, ſome attempts ought always to be made to reſtore him to life. Infants are moſt liable to convulſions, and are often carried off very ſuddenly by one or more fits about the time of teething. There are many well-authenticated accounts of infants having been reſtored to life, after they had to all appearance expired in convulſions; but we ſhall only relate the following inſtance mentioned by Dr. Johnſon in his pamphlet on the practicability of recovering perſons viſibly dead: In the pariſh of St. Clements, at Colcheſter, a child of ſix months old, lying upon its mother's lap, having had the breaſt, was ſeized with a ſtrong convulſion fit, which laſted ſo long, and ended with ſo total a privation of motion of the body, lungs, and pulſe, that it was deemed abſolutely dead. It was accordingly ſtripped, laid out, the paſſing-bell ordered to be tolled, and a coffin to be made; but a neighbouring gentlewoman who uſed to admire the child, hearing of its ſudden death, haſtened to the houſe, and upon examining the child found it not cold, its joints limber, and fancied that a glaſs ſhe held to its mouth and noſe was a little damped with the breath; upon which ſhe took the child in her lap, ſat down before the fire, rubbed it, and kept it in gentle agitation. In a quarter of an hour ſhe felt the heart begin to beat faintly; ſhe then put a little of the mother's milk into its mouth, continued to rub its palms and ſoles, found the child begin to move, and the milk was ſwallowed; and in another quarter of an hour ſhe had the ſatisfaction of reſtoring to its diſconſolate mother the babe quite recovered, eager to lay hold of the breaſt, and able to ſuck again. The child throve, had no more fits, is grown up, and at preſent alive. There are many other things which might be done, in caſe the above ſhould not ſucceed; as rubbing the body with ſtrong ſpirits, covering it with warm aſhes or ſalt, blowing air into the lungs, throwing up warm ſtimulating clyſters, or the ſmoke of tobacco, into the inteſtines, and ſuch like. When children are dead born, or expire ſoon after the birth, the ſame means ought to be uſed for their recovery as if they had expired in circumſtances ſimilar to thoſe juſt mentioned. Theſe directions may likewiſe be extended to adults, attention being always paid to the age and other circumſtances of the patient. The means uſed with ſo much efficacy in recovering drowned perſons are, with equal ſucceſs, applicable to a number of caſes where the powers of life ſeem in reality to be only ſuſpended, and to remain capable of renewing all their functions, on being put into motion again. It is ſhocking to reflect, that for want of this conſideration many perſons have been committed to the grave, in whom the principles of life might have been revived. The caſes wherein ſuch endeavours are moſt likely to be attended with ſucceſs, are all thoſe called ſudden deaths from an inviſible cauſe, as apoplexies, hyſterics, faintings, and many other diſorders wherein perſons in a moment ſink down and expire. The various caſualties in which they may be tried are, ſuffocations, from the ſulphureous damps of mines, coal-pits, &c. the unwholeſome air of long-unopened wells or caverns; the noxious vapours ariſing from fermenting liquors; the ſteams of burning charcoal; ſulphureous mineral acids; arſenical effluvia, &c. The various accidents of drowning, ſtrangling, and apparent deaths, by blows, falls, hunger, cold, &c. likewiſe furniſh opportunities of trying ſuch endeavours. Thoſe perhaps who to appearance are killed by lightning, or by any violent agitation of the paſſions, as fear, joy, ſurpriſe, and ſuch-like, might alſo be frequently recovered by the uſe of proper means, as blowing ſtrongly into their lungs, &c.

## OF COLD BATHING.

IMMERSION in cold water is a cuſtom which lays claim to the moſt remote antiquity: indeed it muſt have been coeval with man himſelf. The neceſſity of water for the purpoſe of cleanlineſs, and the pleaſure ariſing from its application to the body in hot countries, muſt very early have recommended it to the human ſpecies. Even the example of other animals was ſufficient to give the hint to man. By inſtinct many of them are led to apply cold water in this manner; and ſome, when deprived of its uſe, have been known to languiſh, and even to die. But whether the practice of cold bathing aroſe from neceſſity, reaſoning, or imitation, is an inquiry of no importance; our buſineſs is to point out the advantages which may be derived from it, and to guard people againſt an improper uſe of it. The cold bath recommends itſelf in a variety of caſes; and is peculiarly beneficial to the inhabitants of populous cities, who indulge in idleneſs, and lead ſedentary lives. In perſons of this deſcription the action of the ſolids is always too weak, which induces a languid circulation, a crude indigeſted maſs of humours, and obſtructions in the capillary veſſels and glandular ſyſtem. Cold water, from its gravity, as well as its tonic power, is well calculated either to obviate or remove theſe ſymptoms. It accelerates the motion of the blood, promotes the different ſecretions, and gives permanent vigour to the ſolids. But all theſe important purpoſes will be more eſſentially anſwered by the application of ſalt water. This ought not only to be preferred on account of its ſuperior gravity, but likewiſe for its greater power of ſtimulating the ſkin, which promotes the perſpiration, and prevents the patient from catching cold. It is neceſſary, however, to obſerve, that cold bathing is more likely to prevent, than to remove, obſtructions of the glandular or lymphatic ſyſtem. Indeed, when theſe have arrived at a certain pitch, they are not to be removed by any means. In this caſe the cold bath will only aggravate the ſymptoms, and hurry the unhappy patient into an untimely grave. It is therefore of the utmoſt importance, previous to the patient's entering upon the uſe of the cold bath, to determine whether or not he labours under any obſtinate obſtructions of the lungs or other *viſcera*; and, where this is the caſe, cold bathing ought ſtrictly to be prohibited. In what is called a plethoric ſtate, or too great a fulneſs of the body, it is likewiſe dangerous to uſe the cold bath, without due preparation. In this caſe there is great danger of burſting a blood-veſſel, or occaſioning an inflammation of the brain, or ſome of the *viſcera*. This precaution is the more neceſſary to citizens, as moſt of them live full, and are of a groſs habit. Yet, what is very remarkable, theſe people reſort in crouds every ſeaſon to the ſea-ſide, and plunge in the water without the leaſt conſideration. No doubt they often eſcape with impunity; but does this give a ſanction to the practice? Perſons of this deſcription ought by no means to bathe, unleſs the body has been previouſly prepared by ſuitable evacuations. Another claſs of patients, who ſtand peculiarly in need of the bracing qualities of cold water, is the nervous. This includes a great number of the male, and almoſt all the female, inhabitants of great cities. Yet even thoſe perſons ought to be cautious in uſing the cold bath. Nervous people have often weak bowels, and may, as well as others, be ſubject to congeſtions and obſtructions of the *viſcera*; and in this caſe they will not be able to bear the effects of the cold water. For them, therefore, and indeed for all delicate people, the beſt plan would be to accuſtom themſelves to it by the moſt pleaſing and gentle degrees. They ought to begin with the temperate bath, and gradually uſe it cooler, till at length the coldeſt proves quite agreeable. Nature revolts againſt all great tranſitions; and thoſe who do violence to her dictates have often cauſe to repent of their temerity. To young people, and particularly to children, cold bathing is of the laſt importance. Their lax fibres render its tonic powers peculiarly proper. It promotes their growth, increaſes their ſtrength, and prevents a variety of diſeaſes incident to childhood. The moſt proper time of the day for uſing the cold bath is no doubt the morning, or at leaſt before dinner; and the beſt mode, that of quick immerſion. As cold bathing has a conſtant tendency to propel the blood and other humours towards the head, it ought to be a rule always to wet that part as ſoon as poſſible. By due attention to this circumſtance, there is reaſon to believe, that violent head-achs, and other complaints, which frequently proceed from cold bathing, might be often prevented. The cold bath, when too long continued in, not only occaſions an exceſſive flux of humours towards the head, but chills the blood, cramps the muſcles, relaxes the nerves, and wholly defeats the intentions of bathing. Hence, by not adverting to this circumſtance, expert ſwimmers are often injured, and ſometimes even loſe their lives. All the beneficial purpoſes of cold bathing are anſwered by one ſingle immerſion; and the patient ought to be rubbed dry the moment he comes out of the water, and ſhould continue to take exerciſe for ſome time after. When cold bathing occaſions chilneſs, loſs of appetite, liſtleſſneſs, pain of the breaſt or bowels, a proſtration of ſtrength, or violent head-achs, it ought to be diſcontinued.

## OF DRINKING THE MINERAL WATERS.

THE waters moſt in uſe for medical purpoſes in Britain, are thoſe impregnated with ſalts, ſulphur, iron, and mephitic air, either ſeparately, or variouſly combined. The errors which ſo often defeat the intention of drinking the purgative mineral waters, and which ſo frequently prove injurious to the patient, proceed from the manner of uſing them, the quantity taken, the regimen purſued, or uſing them in caſes where they are not proper. Drinking the water in too great quantity, not only injures the bowels and occaſions indigeſtion, but generally defeats the intention for which it is taken. The diſeaſes for the cure of which mineral waters are chiefly celebrated, are moſtly of the chronic kind; and it is well known that ſuch diſeaſes can only be cured by the ſlow operation of alteratives, or ſuch medicines as act by inducing a gradual change in the habit. This requires length of time, and never can be effected by medicines which run off by ſtool, and operate chiefly on the firſt paſſages. Thoſe who wiſh for the cure of any obſtinate malady from the mineral waters, ought to take them in ſuch a manner as hardly to produce any effect whatever on the bowels. With this view a half-pint glaſs may be drunk at bed-time, and the ſame quantity an hour before breakfaſt, dinner, and ſupper. The doſe, however, muſt vary according to circumſtances. Even the quantity mentioned above will purge ſome perſons, while others will drink twice as much without being in the leaſt moved by it. Its operation on the bowels is the only ſtandard for uſing the water as an alterative. No more ought to be taken than barely to move the body; nor is it always neceſſary to carry it this length, provided the water goes off by the other emunctories, and does not occaſion a chilneſs, or flatulency in the ſtomach or bowels. When the water is intended to purge, the quantity mentioned above may be all taken before breakfaſt. To promote the operation of mineral waters, and to carry them through the ſyſtem, exerciſe is indiſpenſably neceſſary. This may be taken in any manner that is moſt agreeable to the patient, but he ought never to carry it to exceſs. As a purgative, theſe waters are chiefly recommended in diſeaſes of the firſt paſſages, accompanied with, or proceeding from, inactivity of the ſtomach and bowels, acidity, indigeſtion, vitiated bile, worms, putrid ſores, the piles, and jaundice. In moſt caſes of this kind, they are the beſt medicines that can be adminiſtered. But, when uſed with this view, it is ſufficient to take them twice, or at moſt three times, a week, ſo as to move the body three or four times; and it will be proper to continue this courſe for ſome weeks. But the operation of the more active mineral waters is not confined to the bowels. They often promote the diſcharge of urine, and not unfrequently increaſe the perſpiration. This ſhews that they are capable of penetrating into every part of the body, and of ſtimulating the whole ſyſtem. Hence ariſes their efficacy in removing the moſt obſtinate of all diſorders, obſtructions of the glandular and lymphatic ſyſtem. Under this claſs is comprehended the ſcrophula or king's evil, indolent tumours, obſtructions of the liver, ſpleen, kidneys, and meſenteric glands. When theſe great purpoſes are to be effected, the waters muſt be uſed in the gradual manner mentioned above, and perſiſted in for a length of time. It will be proper, however, now and then to diſcontinue their uſe for a few days. The next great claſs of diſeaſes, where mineral waters are found to be beneficial, are thoſe of the ſkin, as the itch, ſcab, tetters, ring-worms, ſcaly eruptions, leproſies, blotches, foul ulcers, &c. Though theſe may ſeem ſuperficial, yet they are often the moſt obſtinate which the phyſician has to encounter, and not unfrequently ſet his ſkill at defiance: but they will ſometimes yield to the application of mineral waters for a ſufficient length of time, and in moſt caſes of this kind theſe waters deſerve a trial.

## OF THE VENEREAL DISEASE.

IT is peculiarly unfortunate for the unhappy perſons who contract this diſeaſe, that it lies under a ſort of diſgrace. This renders diſguiſe neceſſary, and makes the patient either conceal his diſorder altogether, or apply to thoſe who promiſe a ſudden and ſecret cure; but who in fact only remove the ſymptoms for a time, while they fix the diſeaſe deeper in the habit. By this means a ſlight infection, which might have been eaſily removed, is often converted into an obſtinate, and ſometimes incurable, malady. Another unfavourable circumſtance attending this diſeaſe is, that it aſſumes a variety of different ſhapes, and may with more propriety be called an aſſemblage of diſeaſes, than a ſingle one. No two diſeaſes can require a more different method of treatment than this does in its different ſtages. Hence the folly and danger of truſting to any particular noſtrum for the cure of it. Such noſtrums are however generally adminiſtered in the ſame manner to all who apply for them, without the leaſt regard to the ſtate of the diſeaſe, the conſtitution of the patient, the degree of infection, and a thouſand other circumſtances of the utmoſt importance. Though the venereal diſeaſe is generally the fruit of unlawful embraces, yet it may be communicated to the innocent as well as the guilty. Infants, nurſes, midwives, and married women whoſe huſbands lead diſſolute lives, are often affected with it, and frequently loſe their lives by not being aware of their danger in due time. The unhappy condition of ſuch perſons certainly requires that we ſhould endeavour to point out the ſymptoms and cure of this too common diſeaſe.

## OF THE VIRULENT GONORRHŒA.

THE virulent gonorrhœa is an involuntary diſcharge of infectious matter from the parts of generation in either ſex. It generally makes its appearance within eight or ten days after the infection has been received; ſometimes indeed it appears in two or three days, and at other times not before the end of four or five weeks. Previous to the diſcharge, the patient feels an itching with a ſmall degree of pain in the genitals. Afterwards a thin glary matter begins to diſtil from the urinary paſſage, which ſtains the linen, and occaſions a ſmall degree of titillation, particularly in the time of making water; this, gradually increaſing, ariſes at length to a degree of heat and pain, which are chiefly perceived about the extremity of the urinary paſſage, where a ſlight degree of redneſs and inflammation begin to appear. As the diſorder advances, the pain, heat of urine, and running, increaſe, while freſh ſymptoms daily enſue. In men the erections become painful and involuntary, and are more frequent and laſting than when natural. This ſymptom is moſt troubleſome when the patient is warm in bed. The pain, which was at firſt only perceived towards the extremity, now begins to reach all up the urinary paſſage, and is moſt intenſe juſt after the patient has done making water. The running gradually recedes from the colour of ſeed, grows yellow, and at length puts on the appearance of matter. When the diſorder has arrived at its height, all the ſymptoms are more intenſe; the heat of urine is ſo great, that the patient dreads the making water, and, though he feels a conſtant inclination this way, yet it is rendered with the greateſt difficulty, and often only by drops: the involuntary erections now become extremely painful and frequent; there is alſo a pain, heat, and ſenſe of fulneſs, about the ſeat, and the running is plentiful and ſharp, of a brown greeniſh, and ſometimes of a bloody, colour.

CURE.---When a perſon has reaſon to ſuſpect that he has caught the venereal infection, he ought moſt ſtrictly to obſerve a cooling regimen, to avoid every thing of a heating nature, as wines, ſpirituous liquors, rich ſauces, ſpiced, ſalted, high-ſeaſoned, and ſmoke-dried, proviſions, &c. as alſo all aromatic and ſtimulating vegetables, as onions, garlic, ſhallot, nutmeg, muſtard, cinnamon, mace, ginger, and ſuch-like. His food ought chiefly to conſiſt of mild vegetables, milk, broths, light puddings, panada, gruels, &c. His drink may be barley-water, milk and water, decoctions of marſh-mallows and liquorice, linſeed-tea, or clear whey. Of theſe he ought to drink plentifully. Violent exerciſe of all kinds, eſpecially riding on horſeback, and venereal pleaſures, are to be avoided. The patient muſt beware of cold, and, when the inflammation is violent, he ought to keep his bed. A virulent gonorrhœa cannot always be cured ſpeedily and effectually at the ſame time. The patient ought therefore not to expect, nor the phyſician to promiſe, it. It will often continue for two or three weeks, and ſometimes for five or ſix, even where the treatment has been very proper. Sometimes indeed a ſlight infection may be carried off in a few days, by bathing the parts in warm milk and water, and injecting frequently up the urethra a little ſweet oil or linſeed-tea about the warmth of new milk. Should theſe not ſucceed in carrying off the infection, they will at leaſt have a tendency to leſſen its virulence. To effect a cure, however, aſtringent injections will generally be found neceſſary. Theſe may be various ways prepared, but thoſe made with the white vitriol are both moſt ſafe and efficacious. They can be made ſtronger or weaker as circumſtances may require, but it is beſt to begin with the more gentle, and increaſe their power if neceſſary. A drachm of white vitriol may be diſſolved in eight or nine ounces of common or roſe water, and an ordinary ſyringe full of it thrown up three or four times a-day. If this quantity does not perform a cure, it may be repeated, and the doſe increaſed. Whether injections be uſed or not, cooling purges are always proper in the gonorrhœa. They ought not however to be of the ſtrong or draſtic kind. Whatever raiſes a violent commotion in the body increaſes the danger, and tends to drive the diſeaſe deeper into the habit. Procuring two or three ſtools every ſecond or third day for the firſt fortnight, and the ſame number every fourth or fifth day for the ſecond, will generally be ſufficient to remove the inflammatory ſymptoms, to diminiſh the running, and to change the colour and conſiſtence of the matter, which gradually becomes more clear and ropy as the virulence abates. When the inflammatory ſymptoms run high, bleeding is always neceſſary at the beginning. This operation, as in other topical inflammations, muſt be repeated according to the ſtrength and conſtitution of the patient, and the vehemence and urgency of the ſymptoms. Medicines which promote the ſecretion of urine are likewiſe proper in this ſtage of the diſorder. For this purpoſe an ounce of nitre and two ounces of gum-arabic, pounded together, may be divided into twenty-four doſes, one of which may be taken frequently, in a cup of the patient's drink. If theſe ſhould make him paſs his urine ſo often as to become troubleſome to him, he may either take them leſs frequently, or leave out the nitre altogether, and take equal parts of gum-arabic and cream of tartar. Theſe may be pounded together, and a tea-ſpoonful taken in a cup of the patient's drink four or five times a-day. I have generally found this anſwer extremely well, both as a diuretic, and for keeping the body gently open. When the pain and inflammation are ſeated high, towards the neck of the bladder, it will be proper frequently to throw up an emollient clyſter, which, beſides the benefit of procuring ſtools, will ſerve as fomentations to the inflamed parts. Soft poultices, when they can be conveniently be applied to the parts, are of great ſervice. They may be made of the flour of linſeed, or of wheat-bread and milk, ſoftened with freſh butter or ſweet oil. When poultices cannot be conveniently uſed, cloths wrung out of warm water, or bladders filled with warm milk and water, may be applied. Few things tend more to keep off inflammation in the ſpermatic veſſels than a proper truſs for the ſcrotum. It ought to be ſo contrived as to ſupport the teſticles, and ſhould be worn from the firſt appearance of the diſeaſe till it has ceaſed ſome weeks. Many people, on the firſt appearance of a gonorrhœa, fly to the uſe of mercury. This is a bad plan. Mercury is often not at all neceſſary in a gonorrhœa, and, when taken too early, it does miſchief. It may be neceſſary to complete the cure, but it never can be proper at the commencement of it. When bleeding, purging, fomentations, and the other things recommended above, have eaſed the pain, ſoftened the pulſe, relieved the heat of urine, and rendered the involuntary erections leſs frequent, the patient may begin to uſe mercury in any form that is leaſt diſagreeable to him. If he takes the common mercurial pill, two at night and one in the morning will be a ſufficient doſe at firſt. Should they affect the mouth too much, the doſe muſt be leſſened; if not at all, it may be gradually increaſed to five or ſix pills in the day. If calomel be thought preferable, two or three grains of it, formed into a bolus with a little of the conſerve of hips, may be taken at bed-time, and the doſe gradually increaſed to eight or ten grains. One of the moſt common preparations of mercury now in uſe is the corroſive ſublimate. This may be taken in the manner hereafter recommended under the confirmed lues or pox: it is one of the moſt ſafe and efficacious medicines when properly uſed. The above medicines may either be taken every day or every other day, as the patient is able to bear them. They ought never to be taken in ſuch quantity to raiſe a ſalivation, unleſs in a very ſlight degree. The diſeaſe may be more ſafely, and as certainly, cured without a ſalivation as with it. When the mercury runs off by the mouth, it is not ſo ſucceſsful in carrying off the diſeaſe, as when it continues longer in the body, and is diſcharged gradually. Should the patient be purged or griped in the night by the mercury, he muſt take an infuſion of ſenna, or ſome other purgative, and drink freely of water-gruel to prevent bloody ſtools, which are very apt to happen ſhould the patient catch cold, or if the mercury has not been duly prepared. When the bowels are weak, and the mercury is apt to gripe or purge, theſe diſagreeable conſequences may be prevented by taking, with the above pills or bolus, half a drachm or two ſcruples of diaſcordium, or of the Japonic confection. To prevent the diſagreeable circumſtances of the mercury's affecting the mouth too much, or bringing on a ſalivation, it may be combined with purgatives. With this view the laxative mercurial pill has been contrived, the uſual doſe of which is half a drachm, or three pills, night and morning, to be repeated every other day; but the ſafer way is for the patient to begin with two, or even with one, pill, gradually increaſing the doſe. To ſuch perſons as can neither ſwallow a bolus or a pill, mercury may be given in a liquid form, as it can be ſuſpended even in a watery vehicle, by means of gum-arabic; which not only ſerves this purpoſe, but likewiſe prevents the mercury from affecting the mouth, and renders it in many reſpects a better medicine. Take quickſilver one drachm; gum-arabic reduced to a mucilage in a marble mortar, until the globules of mercury entirely diſappear: afterwards add gradually, ſtill continuing the trituration, half an ounce of balſamic ſyrup, and eight ounces of ſimple cinnamon-water. Two table-ſpoonfuls of this ſolution may be taken night and morning. It happens very fortunately for thoſe who cannot be brought to take mercury inwardly, and likewiſe for perſons whoſe bowels are too tender to bear it, that an external application of it anſwers equally well, and, in ſome reſpects, better. It muſt be acknowledged, that mercury, taken inwardly for any length of time, greatly weakens and diſorders the bowels; for which reaſon, when a plentiful uſe of it becomes neceſſary, we would prefer rubbing to the mercurial pills. The common mercurial or blue ointment will anſwer very well. Of that which is made by rubbing together equal quantities of hog's-lard and quickſilver, about a drachm may be uſed at a time. The beſt time for rubbing it on is at night, and the moſt proper place is the inner ſide of the thighs. The patient ſhould ſtand before the fire when he rubs, and ſhould wear flannel drawers next his ſkin at the time he is uſing the ointment. If ointment of a weaker or ſtronger kind be uſed, the quantity muſt be increaſed or diminiſhed in proportion. If, during the uſe of the ointment, the inflammation of the genital parts, together with the heat and feveriſhneſs, ſhould return, or if the mouth ſhould grow ſore, the gums tender, and the breath become offenſive, a doſe or two of Glauber's ſalts, or ſome other cooling purge, may be taken, and the rubbing intermitted for a few days. As ſoon, however, as the ſigns of ſpitting are gone off, if the virulency be not quite corrected, the ointment muſt be repeated, but in ſmaller quantities, and at longer intervals, than before. Whatever way mercury is adminiſtered, its uſe muſt be perſiſted in as long as any virulency is ſuſpected to remain. When the above treatment has removed the heat of urine, and ſoreneſs of the genital parts; when the quantity of running is conſiderably leſſened, without any pain or ſwelling in the groin or teſticle ſupervening; when the patient is free from involuntary erections; and laſtly, when the running becomes pale, whitiſh, thick, void of ill ſmell, and tenacious or ropy; when all or moſt of theſe ſymptoms appear, the gonorrhœa is arrived at its laſt ſtage, and we may gradually proceed to treat it as a gleet with aſtringent and agglutinating medicines.

## OF GLEETS.

A GONORRHŒA frequently repeated, or improperly treated, often ends in a gleet, which may either proceed from relaxation, or from ſome remains of the diſeaſe. It is, however, of the greateſt importance, in the cure of the gleet, to know from which of theſe cauſes it proceeds. When the diſcharge proves very obſtinate, and receives little or no check from aſtringent remedies, there is ground to ſuſpect that it is owing to the latter; but, if the drain is inconſtant, and is chiefly obſervable when the patient is ſtimulated by laſcivious ideas, or upon ſtraining to go to ſtool, we may reaſonably conclude that it is chiefly owing to the former. In the cure of a gleet proceeding from relaxation, the principal deſign is to brace, and reſtore a proper degree of tenſion to, the debilitated and relaxed veſſels. For this purpoſe, beſides the medicines recommended in the gonorrhœa, the patient may have recourſe to ſtronger and more powerful aſtringents, as the Peruvian bark, alum, vitriol, galls, tormentil, biſtort, balauſtines, tincture of gum-kino, &c. The injections may be rendered more aſtringent by the addition of a few grains of alum, or increaſing the quantity of vitriol as far as the parts are able to bear it. The laſt remedy which we ſhall mention in this caſe is the cold bath, than which there is not perhaps a more powerful bracer in the whole compaſs of medicine. It ought never to be omitted in this ſpecies of gleet, unleſs there be ſomething in the conſtitution of the patient which renders the uſe of it unſafe. The chief objections to the uſe of the cold bath are, a full habit, and an unſound ſtate of the viſcera. The danger from the former may always be leſſened, if not removed, by purging and bleeding; but the latter is an unſurmountable obſtacle, as the preſſure of the water, and the ſudden contraction of the external veſſels, by throwing the blood with too much force upon the internal parts, are apt to occaſion ruptures of the veſſels, or a flux of humours upon the diſeaſed organs. But, where no objection of this kind prevails, the patient ought to plunge over head in water every morning faſting, for three or four weeks together. He ſhould not, however, ſtay long in the water, and ſhould take care to have his ſkin dried as ſoon as he comes out. The regimen proper in this caſe is the ſame as was mentioned in the laſt ſtage of the gonorrhœa: the diet muſt be drying and aſtringent, and the drink, Spa, Pyrmont, or Briſtol, waters, with which a little claret or red wine may ſometimes be mixed. Any perſon may now afford to drink theſe waters, as they can every where be prepared at almoſt no expence, by a mixture of common chalk and oil of vitriol. When the gleet does not yield to theſe medicines, there is reaſon to ſuſpect that it proceeds from ulcers. In this caſe, recourſe muſt be had to mercury, and ſuch medicines as tend to correct any predominant acrimony with which the juices may be affected, as the decoction of china, ſarſaparilla, ſaſſafras, or the like. The beſt remedy for the cure of ulcers in the urinary paſſage, are the ſuppurating candles or bougies; as theſe are prepared various ways, and are generally to be bought ready-made, it is needleſs to ſpend time in enumerating the different ingredients of which they are compoſed, or teaching the manner of preparing them: before a bougie be introduced into the urethra, however, it ſhould be ſmeared all over with ſweet oil, to prevent it from ſtimulating too ſuddenly; it may be ſuffered to continue in from one to ſeven or eight hours, according as the patient can bear it. Obſtinate ulcers are not only often healed, but tumours and excreſcences in the urinary paſſages taken away, and an obſtruction of urine removed, by means of bougies.

## OF THE SWELLED TESTICLE.

THE ſwelled teſticle may either proceed from infection lately contracted, or from the venereal poiſon lurking in the blood: the latter indeed is not very common, but the former frequently happens both in the firſt and ſecond ſtages of a gonorrhœa; particularly when the running is unſeaſonably checked, by cold, hard drinking, ſtrong draſtic purges, violent exerciſe, the too early uſe of aſtringent medicines, or the like. In the inflammatory ſtage bleeding is neceſſary, which muſt be repeated according to the urgency of the ſymptoms. The food muſt be light, and the drink diluting. High-ſeaſoned food, fleſh, wines, and every thing of a heating nature, are to be avoided. Fomentations are of ſingular ſervice. Poultices of bread and milk, ſoftened with freſh butter or oil, are likewiſe very proper, and ought conſtantly to be applied when the patient is in bed: when he is up, the teſticle ſhould be kept warm, and ſupported by a bag or truſs, which may eaſily be contrived in ſuch a manner as to prevent the weight of the teſticle from having any effect. If it ſhould be found impracticable to clear the teſticle by the cooling regimen now pointed out, and extended according to circumſtances, it will be neceſſary to lead the patient through ſuch a complete anti-venereal courſe as ſhall enſure him againſt any future uneaſineſs. For this purpoſe, beſides rubbing the mercurial ointment on the part, if free from pain, or on the thighs, as directed in the gonorrhœa, the patient muſt be confined to bed, if neceſſary, for five or ſix weeks, ſuſpending the teſticle all the while with a bag or truſs, and plying him inwardly with ſtrong decoctions of ſarſaparilla. When theſe means do not ſucceed, and there is reaſon to ſuſpect a ſcrophulous or cancerous habit, either of which may ſupport a ſchirrhous induration, after the venereal poiſon is corrected, the parts ſhould be fomented daily with a decoction of hemlock, the bruiſed leaves of which may likewiſe be added to the poultice, and the extract at the ſame time taken inwardly. By this method, diſeaſed teſticles of two or three years ſtanding, even when ulcerated, and affected with pricking and lancing pains, have been completely cured.

## OF BUBOES.

VENEREAL buboes are hard tumours ſeated in the groin, occaſioned by the venereal poiſon lodged in this part. They are of two kinds; viz. ſuch as proceed from a recent infection, and ſuch as accompany a confirmed lues. The cure of recent buboes, that is, ſuch as appear ſoon after impure coition, may be firſt attempted by diſperſion, and, if that ſhould not ſucceed, by ſuppuration. To promote the diſperſion of a buboe, the ſame regimen muſt be obſerved as was directed in the firſt ſtage of a gonorrhœa. The patient muſt likewiſe be bled, and take ſome cooling purges, as the decoction of tamarinds and ſenna, Glauber's ſalts, and the like. If, by this courſe, the ſwelling and other inflammatory ſymptoms abate, we may ſafely proceed to the uſe of mercury, which muſt be continued till the venereal virus is quite ſubdued. But, if the buboe ſhould, from the beginning, be attended with great heat, pain, and pulſation, it will be proper to promote its ſuppuration. For this purpoſe the patient may be allowed to uſe his ordinary diet, and to take now and then a glaſs of wine. Emollient cataplaſms, conſiſting of bread and milk ſoftened with oil or freſh butter, may be applied to the part; and, in cold conſtitutions, where the tumour advances ſlowly, white-lily roots boiled, or ſliced onions raw, and a ſufficient quantity of yellow baſilicon, may be added to the poultice. When the tumour is ripe, which may be known by its conical figure, the ſoftneſs of the ſkin, and a fluctuation of matter plainly to be felt under the finger, it may be opened either by cauſtic or a lancet, and afterwards dreſſed with digeſtive ointment. It ſometimes, however, happens that buboes can neither be diſperſed nor brought to a ſuppuration, but remain hard indolent tumours. In this caſe the indurated glands muſt be conſumed by cauſtic; if they ſhould become ſchirrhous, they muſt be diſſolved by the application of hemlock, both externally and internally, as directed in the ſchirrhous teſticle.

## OF CHANCRES.

CHANCRES are ſuperficial, callous, eating, ulcers; which may happen either with or without a gonorrhœa. They are commonly ſeated about the glans, and make their appearance in the following manner: firſt a little red pimple ariſes, which ſoon becomes pointed at top, and is filled with a whitiſh matter inclining to yellow. This pimple is hot, and itches generally before it breaks: afterwards it degenerates into an obſtinate ulcer, the bottom of which is uſually covered with a viſcid mucus, and whoſe edges gradually become hard and callous. Sometimes the firſt appearance reſembles a ſimple excoriation of the cuticle; which, however, if the caſe be venereal, ſoon becomes a true chancre. A chancre is ſometimes a primary affection, but it is much oftener ſymptomatic, and is the mark of a confirmed lues. Primary chancres diſcover themſelves ſoon after impure coition, and are generally ſeated in parts covered with a thin cuticle, as the lips, the nipples of women, the *glans penis* of men, &c. When venereal ulcers are ſeated in the lips, the infection may be communicated by kiſſing. When a chancre appears ſoon after impure coition, its treatment is nearly ſimilar to that of the virulent gonorrhœa. The patient muſt obſerve the cooling regimen, loſe a little blood, and take ſome gentle doſes of ſalts and manna. The parts affected ought frequently to be bathed, or rather ſoaked, in warm milk and water, and, if the inflammation be great, an emollient poultice or cataplaſm may be applied to them. This courſe will, in moſt caſes, be ſufficient to abate the inflammation, and prepare the patient for the uſe of mercury. Symptomatic chancres are commonly accompanied with ulcers in the throat, nocturnal pains, ſcurfy eruptions about the roots of the hair, and other ſymptoms of a confirmed lues. Though they may be ſeated in any of the parts mentioned above, they commonly appear upon the private parts, or the inſide of the thigh. They are alſo leſs painful, but frequently much larger and harder, than primary chancres. This diſorder is uſually attended with a ſtranguary or obſtruction of urine, a phymoſis, &c. A ſtranguary may be occaſioned either by a ſpaſmodic conſtriction, or an inflammation of the urethra and parts about the neck of the bladder. In the former caſe, the patient begins to void his urine with tolerable eaſe; but, as ſoon as it touches the galled or inflamed urethra, a ſudden conſtriction take place, and the urine is voided by ſpirts, and ſometimes by drops only. When the ſtranguary is owing to an inflammation about the neck of the bladder, there is a conſtant heat and uneaſineſs of the part, a perpetual deſire to make water, while the patient can only render a few drops, and a troubleſome teneſmus, or conſtant inclination to go to ſtool. When the ſtranguary is owing to ſpaſm, ſuch medicines as tend to dilute and blunt the ſalts of the urine will be proper. For this purpoſe, beſides the common diluting liquors, ſoft and cooling emulſions, ſweetened with the ſyrup of poppies, may be uſed. Should theſe not have the deſired effect, bleeding, and emollient fomentations, will be neceſſary. When the complaint is evidently owing to an inflammation about the neck of the bladder, bleeding muſt be more liberally performed, and repeated according to the urgency of the ſymptoms. After bleeding, if the ſtranguary ſtill continues, ſoft clyſters, with a proper quantity of laudanum in them, may be adminiſtered, and emollient fomentations applied to the region of the bladder. At the ſame time, the patient may take every four hours a teacup-full of barley-water, to an Engliſh pint of which ſix ounces of the ſyrup of marſh-mallows, four ounces of the oil of ſweet almonds, and half an ounce of nitre, may be added. If theſe remedies ſhould not relieve the complaint, and a total ſuppreſſion of urine ſhould come on, bleeding muſt be repeated, and the patient ſet in a warm bath up to the middle. It will be proper, in this caſe, to diſcontinue the diuretics, and to draw off the water with a catheter; but, as the patient is ſeldom able to bear its being introduced, we would rather recommend the uſe of mild bougies. Theſe often lubricate the paſſage, and greatly facilitate the diſcharge of urine. Whenever they begin to ſtimulate or give any uneaſineſs, they may be withdrawn. The phymoſis is ſuch a conſtriction of the prepuce over the glans as hinders it from being drawn backwards; the paraphymoſis, on the contrary, is ſuch a conſtriction of the prepuce behind the glans as hinders it from being brought forwards. The treatment of theſe ſymptoms is ſo nearly the ſame with that of the virulent gonorrhœa, that we have no occaſion to enlarge upon it. In general, bleeding, purging, poultices, and emollient fomentations, are ſufficient. Should theſe, however, fail of removing the ſtricture, and the parts be threatened with a mortification, twenty or thirty grains of ipecacuanha, and one grain of emetic tartar, may be given for a vomit, and may be worked off with warm water and thin gruel. It ſometimes happens, that, in ſpite of all endeavours to the contrary, the inflammation goes on, and ſymptoms of a beginning mortification appear. When this is the caſe, the prepuce muſt be ſcarified with a lancet, and, if neceſſary, divided, in order to prevent a ſtrangulation, and ſet the impriſoned glans at liberty. We ſhall not deſcribe the manner of performing this operation, as it ought always to be done by a ſurgeon. When a mortification has actually taken place, it will be neceſſary, beſides performing the above operations, to foment the parts frequently with cloths wrung out of a ſtrong decoction of camomile flowers and bark, and to give the patient a drachm of the bark in powder every two or three hours. With regard to the priapiſm, chordee, and other diſtortions of the penis, their treatment is no way different from that of the gonorrhœa. When they prove very troubleſome, the patient may take a few drops of laudanum at night, eſpecially after the operation of a purgative through the day.

## OF A CONFIRMED LUES.

THE ſymptoms of a confirmed lues are, buboes in the groin, pains of the head and joints, which are peculiarly troubleſome in the night, or when the patient is warm in bed; ſcabs and ſcurfs in various parts of the body, eſpecially on the head, of a yellowiſh colour, reſembling a honey-comb; corroding ulcers in various parts of the body, which generally begin about the throat, from whence they creep gradually, by the palate, towards the cartilage of the noſe, which they deſtroy; excreſcences or exoſtoſes ariſe in the middle of the bones, and their ſpongy ends become brittle, and break upon the leaſt accident; at other times, they are ſoft, and bend like wax; the conglobate glands become hard and callous, and form, in the neck, armpits, groin, and meſentery, hard moveable tumours, like the king's evil; tumours of different kinds are likewiſe formed in the lymphatic veſſels, tendons, ligaments, and nerves, as the gummata, ganglia, nodes, tophs, &c. the eyes are affected with itching, pain, redneſs, and ſometimes with total blindneſs, and the ears with a ſinging noiſe, pain, and deafneſs, whilſt their internal ſubſtance is exulcerated and rendered carious; at length all the animal, vital, and natural, functions, are depraved; the face becomes pale and livid; the body emaciated and unfit for motion, and the miſerable patient falls into an atrophy or waſting conſumption. Women have ſymptoms peculiar to the ſex; as cancers of the breaſt, a ſuppreſſion or overflowing of the menſes, the whites, hyſteric affections, an inflammation, abſceſs, ſchirrhus, gangrene, cancer, or ulcer, of the womb; they are generally either barren or ſubject to abortion; or, if they bring children into the world, they have an univerſal eryſipelas, are half rotten, and covered with ulcers. Such is the catalogue of ſymptoms attending this dreadful diſeaſe in its confirmed ſtate. Indeed they are ſeldom to be met with in the ſame perſon, or at the ſame time; ſo many of them, however, are generally preſent as are ſufficient to alarm the patient; and, if he has reaſon to ſuſpect the infection is lurking in his body, he ought immediately to ſet about the expulſion of it, otherwiſe the moſt tragical conſequences will enſue. The only certain remedy hitherto known in Europe for the cure of this diſeaſe is mercury, which may be uſed in a great variety of forms, with nearly the ſame ſucceſs. Some time ago it was reckoned impoſſible to cure a confirmed lues without ſalivation; this method is now, however, pretty generally laid aſide, and mercury is found to be as efficacious, or rather more ſo, in expelling the venereal poiſon, when adminiſtered in ſuch a manner as not to run off by the ſalivary glands. The only chemical preparation of mercury which we ſhall take notice of is the corroſive ſublimate. This was ſome time ago brought into uſe for the venereal diſeaſe in Germany, by the illuſtrious Baron Van Swieten; and was ſoon after introduced into Britain by the learned Sir John Pringle, at that time phyſician to the army. The method of giving it is as follows: one grain of corroſive ſublimate is diſſolved in two ounces of French brandy or malt ſpirits; and of this ſolution, an ordinary tableſpoon-full, or the quantity of half an ounce, is to be taken twice a-day, and to be continued as long as any ſymptoms of the diſorder remain. To thoſe whoſe ſtomach cannot bear the ſolution, the ſublimate may be given in form of pills. Several roots, woods, and barks, have been recommended for curing the venereal diſeaſe; but, though none of them, when adminiſtered alone, have been found, upon experience, to anſwer the high encomiums which have been beſtowed upon them, yet, when joined with mercury, many of them are found to be very beneficial in promoting a cure. The beſt we know yet are ſarſaparilla and the mezereon-root, which are powerful aſſiſtants to the ſublimate or to any other mercurial. Thoſe who chuſe to uſe the mezereon by itſelf, may boil an ounce of the freſh bark, taken from the root, in twelve Engliſh pints of water to eight, adding towards the end an ounce of liquorice. The doſe of this is the ſame as of the decoction of ſarſaparilla. We have been told that the natives of America cure the venereal diſeaſe, in every ſtage, by a decoction of the root of a plant called the lobelia. It is uſed either freſh or dried; but we have no certain accounts with regard to the proportion. Sometimes they mix other roots with it, as thoſe of the ranunculus, the ceanothus, &c. but whether theſe are deſigned to diſguiſe or aſſiſt it, is doubtful. The patient takes a large draught of the decoction early in the morning, and continues to uſe it for his ordinary drink through the day. Many other roots and woods are highly extolled for curing the venereal diſeaſe, as the roots of ſoap-wort, burdock, &c. as alſo the wood of guaiacum and ſaſſafras; but, being particularly pointed out in the Herbal, we ſhall, for the ſake of brevity, paſs them over in this place, with only remarking, that, though we are ſtill very much in the dark with regard to the method of curing this diſeaſe among the natives of America, yet it is well known, that they do cure it with ſpeed, ſafety, and ſucceſs, by the uſe of vegetables only, and that without the leaſt knowledge of mercury. Hence it becomes an object of conſiderable importance to diſcover a method of cure in this iſland, by the uſe of vegetables only, by making trials of all the various plants which are found in it, and particularly ſuch as Culpeper was known to make uſe of with ſuch ſingular ſucceſs, and which he has diſtinguiſhed in the Herbal. Indeed there can be no doubt, but plants of our own growth, were proper pains taken to diſcover them, would be found as efficacious in curing the venereal diſeaſe here, as thoſe of America there; for it muſt be remembered, that what will cure a patient of the venereal diſeaſe in one country will not have equal ſucceſs if carried into another; a plain demonſtration that every country produces that which is moſt congenial to the health of its own native inhabitants.

Mercury ought not to be adminiſtered to women in the menſtrual flux, or when the period is near at hand. Neither ſhould it be given in the laſt ſtage of pregnancy. If, however, the woman be not near the time of her delivery, and circumſtances render it neceſſary, mercury may be given, but in ſmaller doſes, and at greater intervals than uſual: with theſe precautions, both the mother and child may be cured at the ſame time; if not, the diſorder will at leaſt be kept from growing worſe, till the woman be brought to bed, and ſufficiently recovered, when a more effectual method may be purſued, which, if ſhe ſuckles her child, will in all probability be ſufficient for the cure of both. Mercury ought always to be adminiſtered to infants with the greateſt caution. Their tender condition unfits them for ſupporting a ſalivation, and makes it neceſſary to adminiſter even the mildeſt preparations of mercury to them with a ſparing hand. A ſimilar conduct is recommended in the treatment of old perſons, who have the misfortune to labour under a confirmed lues. No doubt the infirmities of age muſt render people leſs able to undergo the fatigues of a ſalivation; but this, as was formerly obſerved, is never neceſſary; beſides, we have generally found, that mercury had much leſs effect upon very old perſons than on thoſe who were younger. The moſt proper ſeaſons for entering upon a courſe of mercury, are the ſpring and autumn, when the air is of a moderate warmth; if the circumſtances of the caſe, however, will not admit of delay, we muſt not defer the cure on account of the ſeaſon, but muſt adminiſter the mercury; taking care, at the ſame time, to keep the patient's chamber warmer or cooler, according as the ſeaſon of the year requires. A proper regimen muſt be obſerved by ſuch as are under a courſe of mercury. Inattention to this not only endangers the patient's life, but often alſo diſappoints him of a cure. A much ſmaller quantity of mercury will be ſufficient for the cure of a perſon who lives low, keeps warm, and avoids all manner of exceſs, than of one who cannot endure to put the ſmalleſt reſtraint upon his appetites: indeed it but rarely happens that ſuch are thoroughly cured. There is hardly any thing of more importance, either for preventing or removing venereal infection, than cleanlineſs. By an early attention to this, the infection might often be prevented from entering the body; and, where it has already taken place, its effects may be greatly mitigated. The moment any perſon has reaſon to ſuſpect that he has received the infection, he ought to waſh the parts wirh water and ſpirits, ſweet oil, or milk and water; a ſmall quantity of the laſt may likewiſe be injected up the urethra, if it can be conveniently done. Whether this diſeaſe at firſt took its riſe from dirtineſs is hard to ſay; but, wherever that prevails, the infection is found in its greateſt degree of virulence, which gives ground to believe that a ſtrict attention to cleanlineſs would go far towards extirpating it altogether.

# DISEASES OF WOMEN.

IN all civilized nations, women have the management of domeſtic affairs; and it is very proper they ſhould, as nature has made them leſs fit for the more active and laborious employments. This indulgence, however, is often carried too far; and females, inſtead of being benefited by it, are greatly injured, from the want of exerciſe and free air. To be ſatisfied of this, one need only compare the freſh and ruddy looks of a milk-maid with the pale complexion of thoſe females whoſe whole time is ſpent within doors. Though nature has made an evident diſtinction between the male and female with regard to bodily ſtrength and vigour, yet ſhe certainly never meant, either, that the one ſhould be always without, or the other always within, doors. The confinement of females, beſides hurting their figure and complexion, relaxes their ſolids, weakens their minds, and diſorders all the functions of the body. Hence proceed obſtructions, indigeſtion, flatulence, abortions, and the whole train of nervous diſorders. Theſe not only unfit women for being mothers and nurſes, but often render them whimſical and ridiculous. A ſound mind depends ſo much upon a healthy body, that, where the latter is wanting, the former is rarely to be found. Women who are chiefly employed without doors, in the different branches of huſbandry, gardening, and the like, are almoſt as hardy as their huſbands, and their children are likewiſe ſtrong and healthy. But, as the bad effects of confinement and inactivity upon both ſexes have been already ſhewn, we ſhall proceed to point out thoſe circumſtances in the ſtructure and deſign of females, which ſubject them to peculiar diſeaſes; the chief of which are, their monthly evacuations, pregnancy, child-bearing, &c. Theſe indeed cannot properly be called diſeaſes, but, from the delicacy of the ſex, and their being often improperly managed in ſuch ſituations, they become the ſource of numerous calamities.

## OF THE MENSTRUAL DISCHARGE.

FEMALES generally begin to menſtruate about the age of fifteen, and leave it off about fifty, which renders theſe two periods the moſt critical of their lives. About the firſt appearance of this diſcharge, the conſtitution undergoes a very conſiderable change, generally indeed for the better, though ſometimes for the worſe. The greateſt care is therefore neceſſary, as the future health and happineſs of the female depends, in a great meaſure, upon her conduct at this period. It is the duty of mothers, and thoſe who are intruſted with the education of girls, to inſtruct them early in the conduct and management of themſelves at this critical period of their lives. Falſe modeſty, inattention, and ignorance of what is beneficial or hurtful at this time, are the ſources of many diſeaſes and misfortunes in life, which a few ſenſible leſſons from an experienced matron might have prevented. Nor is care leſs neceſſary in the ſubſequent returns of this diſcharge. Taking improper food, violent affections of the mind, or catching cold at this period, is often ſufficient to ruin the health, or to render the female ever after incapable of procreation. If a girl about this time of life be confined to the houſe, kept conſtantly ſitting, and neither allowed to romp about, nor employed in any active buſineſs, which gives exerciſe to the whole body, ſhe becomes weak, relaxed, and puny; her blood not being duly prepared, ſhe looks pale and wan; her health, ſpirits, and vigour, decline, and ſhe ſinks into a valetudinary for life. Such is the fate of numbers of thoſe unhappy females, who, either from too much indulgence, or their own narrow circumſtances, are, at this critical period, denied the benefit of exerciſe and free air. A lazy indolent diſpoſition proves likewiſe very hurtful to girls at this period. One ſeldom meets with complaints from obſtructions amongſt the more active and induſtrious part of the ſex; whereas the indolent and lazy are ſeldom free from them. Theſe are, in a manner, eat up by the *chloroſis*, or *green ſickneſs*, and other diſeaſes of this nature. We would therefore recommend it to all who wiſh to eſcape theſe calamities, to avoid indolence and inactivity, as their greateſt enemies; and to be as much abroad in the open air as poſſible. After the menſes have once begun to flow, the greateſt care ſhould be taken to avoid every thing that may tend to obſtruct them. Cold is extremely hurtful at this particular period. More of the ſex date their diſorders from cold, caught while they are out of order, than from all other cauſes. This ought ſurely to put them upon their guard, and to make them very circumſpect in their conduct at ſuch times. A degree of cold that will not in the leaſt hurt them at another time, will, at this period, be ſufficient to ruin their health and conſtitution; therefore, from whatever cauſe this flux is obſtructed, except in the ſtate of pregnancy, proper means ſhould be immediately uſed to reſtore it. But the menſtrual flux may be too great as well as too ſmall. When this happens, the patient becomes weak, the colour pale, the appetite and digeſtion are bad, and œdematous ſwellings of the feet, dropſies, and conſumptions, often enſue. To reſtrain the flux, the patient ſhould be kept quiet and eaſy both in body and mind. If it be very violent, ſhe ought to lie in bed with her head low; to live upon a cool and ſlender diet, as veal or chicken broths with bread; and to drink decoctions of nettle-roots, or the greater comfrey. If theſe be not ſufficient to ſtop the flux, ſtronger aſtringents may be uſed, as Japan earth, allum, elixir of vitriol, the Peruvian bark, &c. Two drachms of allum and one of Japan earth may be pounded together, and divided into eight or nine doſes, one of which may be taken three times a-day. Perſons whoſe ſtomachs cannot bear the allum, may take two tableſpoon-fulls of the tincture of roſes three or four times a-day, to each doſe of which ten drops of laudanum may be added. If theſe ſhould fail, half a drachm of the Peruvian bark, in powder, with ten drops of the elixir of vitriol, may be taken in a glaſs of red wine four times a-day. That period of life at which the menſes ceaſe to flow is likewiſe very critical to the ſex. The ſtoppage of any cuſtomary evacuations, however ſmall, is ſufficient to diſorder the whole frame, and often to deſtroy life itſelf. Hence it comes to paſs, that ſo many women either fall into chronic diſorders, or die, about this time. Such of them, however, as will perſevere in taking the Lunar Tincture previous to the time their menſes leave them, will become more healthy and hardy than they were before, and enjoy ſtrength and vigour to a very great age.

## OF THE GREEN-SICKNESS.

THE green-ſickneſs is an obſtruction in the womb-veſſels of young females, under or about the time of their courſes beginning to flow. It is attended with a viſcidity of all the juices, a ſallow, pale, or greeniſh, colour of the face, a difficulty of breathing, a ſickneſs in the ſtomach at the ſight of proper food, and an unnatural deſire of feeding on ſuch things as are accounted hurtful, and unfit for nouriſhment. It is alſo called by phyſicians the white fever, the love fever, the virgin's diſeaſe, and the white jaundice. It ſometimes ſeems to proceed from an alteration of the fluids about the time that the menſes firſt begin to flow, or from the inaptitude of the veſſels to perform thoſe diſcharges which nature then calls for. It may alſo proceed from an obſtruction in the bowels, or a ſluggiſh languid motion of the blood, whether natural, or acquired by eaſe, indulgence, or want of exerciſe: and this latter, no doubt, is the caſe, when the diſtemper happens to very young girls, who are not capable of ſuffering any hyſteric diſorder. Finally, it may proceed from a longing deſire after the enjoyment of ſome particular perſon; or, in general, from a violent inclination to exchange a ſingle life for the ſtate of matrimony; and, when this is the caſe, there is an univerſal dulneſs and diſinclination to exerciſe, and the patient complains of a preſſure or weight, chiefly about the reins and loins. Upon any briſk motion come on a difficulty of breathing, and a tenſion and quick pulſation of the arteries in the temples, which ſeem to beat with great violence; alſo a heavy, and frequently a laſting, pain of the head, and palpitation of the heart. The pulſe is quick and low, attended with a ſmall feveriſhneſs, and a loſs of the natural appetite; but chalk, coals, ſtones, clay, tobacco-pipes, and other things of like unwholeſome nature, ought to be kept as much as poſſible out of the patient's way; for ſhe generally has more inclination to theſe than to a proper diet. The green-ſickneſs is ſeldom dangerous, though it often proves of long continuance; but when very violent, and too much neglected, proceeding from a ſuppreſſion of the monthly courſes, and attended with the whites, it may in time bring on weakneſſes, hard ſwellings, and barrenneſs. When it happens ſome time before the menſes ought to appear, and they break forth without obſtruction, it is uſually cured upon this eruption, without farther means. If the whites come after the green-ſickneſs has been long fixed, it is held to be a bad ſign; if before, and it happens upon the ſtoppage of the menſtrual flux, it often proves critical: if the courſes flow regularly during the diſtemper, it is accounted a good ſymptom, and there is no danger. To forward a cure, the patient ought to be placed in a thin and clear air, to drink tea, barley-water, and other attenuating liquors, warm, and made agreeable to the palate. Her food ſhould be nouriſhing, but eaſy of digeſtion, and not ſuch as may inflame. Moderate exerciſe every day, ſuch as walking, riding, ſtirring about the houſe, is very ſerviceable, notwithſtanding the difficulty and uneaſineſs that attend it, and the great antipathy of the patient to any ſort of motion. Sleep ought to be moderate, and taken at a due diſtance from meals, not till an hour or two, at leaſt, after ſupper. All paſſions of the mind, eſpecially thoſe of melancholy and deſpair, are highly prejudicial; if the diſeaſe, therefore, be found to proceed from a ſettled inclination after marriage, the parents of the patient ſhould endeavour to provide her a ſuitable match, as the moſt effectual cure; or, if the deſire be after a particular perſon, to let her have him at all events, if they approve her choice. But, if matrimony be not judged convenient for her, either on account of youth or for any other reaſon, they muſt then have recourſe to medical remedies, according to the following directions. If the patient be at all plethoric, that is, if her veins be well ſtored with blood, bleeding will be highly proper to begin the cure; and this is to be ſucceeded by proper purgatives. In ſome caſes, eſpecially when the patient is very young, a vomit is often ſucceſsful, being exhibited before purgation. Thoſe cathartics, that are either mixed along with alterative medicines, or given in ſuch quantities as to make them act as alterants, or lie a conſiderable time in the body before they operate, are uſually very efficacious, and in weakly conſtitutions preferable to other purgatives. The following will, in general, be found to perform a cure: Take caſtor, ſaffron, myrrh, black hellebore-root, all in powder, each one drachm; gum-ammoniac, one drachm and a half; ſalt of ſteel, four ſcruples; beſt aloes powdered, two drachms; oil of cinnamon, fifteen drops; ſyrup of the five roots, a ſufficient quantity. Make ten pills out of every drachm, of which let five be taken every night, drinking after them briony-water and penny-royal water, of each two ounces. Theſe are excellent to warm and comfort the nerves, thin the blood and juices, and cauſe them to circulate freely. They muſt be continued regularly for ten or twelve days. And indeed all cathartics of this nature, that are intended to make an alteration in the whole animal ſyſtem, which is often neceſſary in theſe caſes, muſt have much more time to operate than thoſe which are intended only to purge the inteſtines. When the green-ſickneſs proves obſtinate, it is proper to have recourſe to the cold bath, and to the uſe of mineral waters: or an infuſion may be made in lime-water, with chips of guaiacum, ſaſſafras, ſaunders, a little gentian and angelica-root, winter-bark, and Roman wormwood; to which add tincture of ſteel, a ſufficient quantity in proportion to the other ingredients; or infuſe filings of ſteel with the woods and roots. This may be drunk inſtead of the chalybeate-waters, and will frequently anſwer the ſame purpoſe. Decoctions or other preparations of the Jeſuit's bark, with ſteel, wine, and tinctures of black hellebore and cinnamon, being continued a conſiderable time, are alſo very effectual in lax conſtitutions, and where the juices are viſcid; but, when the green-ſickneſs is attended with the whites, nothing is ſo certain a cure as the Lunar Tincture.

## OF THE FLUOR ALBUS, OR WHITES.

THIS diſeaſe may be cauſed by falls, ſprains in the back, purging to exceſs, eſpecially with mercurials, and when the body is weak and lax; or it may be the effects of a venereal infection, which, though cured, leaves the glands and other veſſels in a relaxed ſtate, which is very difficult to repair. The whites come away ſometimes in a large and ſometimes in a ſmall quantity; and it is obſervable, that the running generally increaſes after violent exerciſe, and that it is in greateſt plenty at about the middle of the time between the monthly periods: the matter often proves variable, being ſometimes white mixed with yellow, and at others of a thin wateriſh conſiſtence, greeniſh, and inclining to black; ſharp, corroſive, of an ill ſmell, occaſioning heat of urine, and now and then ulcers. It then cauſes great weakneſs, eſpecially in the ſmall of the back and the loins; a pale colour in the face, faintneſs, loathing of food, indigeſtion, ſwelling of the legs, irregularity in the courſes. Sometimes it degenerates into a conſumption or dropſy, and proves mortal: at others, it cauſes incurable barrenneſs. The urine, under this diſorder, is generally viſcid, thick, and ſlimy, and ſometimes appears as if ſmall threads were mixed with it: nor does it ſettle ſo freely as in other caſes. It has uſually been thought difficult to diſtinguiſh the whites from the venereal diſeaſe; and ſome women, who have had bad huſbands, have laboured under the latter for a long time together, imagining it all the while to be only the former: others have miſtaken a running, occaſioned by an ulcer in the womb, for that diſeaſe. Now, as it is highly neceſſary every woman ſhould learn the ſymptoms by which theſe are known aſunder, let it be obſerved, that, whenever the courſes come down, the whites always ceaſe, and do not trouble the patient again till the courſes are over; whereas a venereal running remains conſtantly upon the patient, appears and does not ceaſe during the monthly diſcharges: it is alſo much leſs in quantity than the whites. As to an ulcer in the womb, it is beſt known by the ſharp and growing pains that it occaſions in the womb from the very beginning of the diſeaſe; whereas in the whites, though ſometimes the humour be ſo ſharp as to cauſe great pain, and even an ulcer, yet this is not till after they have continued long enough on the patient to be diſtinguiſhed by their other ſymptoms. The matter that flows from an ulcer is alſo frequently bloody, which the whites never are. Maids of a weakly conſtitution are often afflicted with this diſtemper, as well as married women and widows; and indeed there are few of the fair ſex, eſpecially ſuch as are any way ſickly, but who have known it more or leſs, it being often occaſioned by other diſeaſes. For whatever diſeaſe renders the blood poor, foul, or viſcous, and reduces a woman to a languid condition, is commonly ſucceeded by the whites, which, when they come in this manner, continue to weaken the body more and more, and are in great danger, without ſpeedy remedy, of wearing away the patient, and making her a miſerable victim to death. Let no woman, therefore, neglect this diſtemper, when ſhe finds it on her, but endeavour to prevent its getting too much a-head. The diet, in the cure of this diſtemper, ought to be nouriſhing, and much the ſame with that preſcribed in conſumptions, conſiſting of broths, boiled with ſhavings of hartſhorn, tormentil-root, biſtort, comfrey, conſerve of red roſes, iſinglaſs, red-roſe flowers, gum-arabic, nutmeg, mace, cinnamon, and other ſtrengthening and agglutinating ingredients. Sago and jellies are alſo ſerviceable in this caſe, particularly that of hartſhorn. Some drink every morning, with very good ſucceſs, a quarter of an ounce of iſinglaſs, diſſolved in a pint of milk, and ſweetened with ſugar. Exerciſe ſhould be moderate, and taken, as much as can be, in a warm and dry air; and the continuance of this for ſome time, with a milk diet, have been found prevalent, when other means, though the beſt that could be made uſe of, have failed. Bleeding ought here to be omitted, unleſs the perſon be plethoric, or her monthly courſes are obſtructed: for it is not proper to weaken her who is already too weak. Purgatives however, are held to be proper, but without calomel, eſpecially when the diſeaſe is in its infancy, and appears but in ſmall quantity. But, when it is of long ſtanding, and the matter which flows is thin, diſcoloured, and of an ill ſmell; if ulcers are apprehended in the *uterus*; if any venereal infection has preceded, and part of the virulence is ſtill ſuppoſed to remain, mercurials and other medicines ſuited to virulent caſes are undeniably proper: and the cure here differs little from the cure of the venereal diſeaſe itſelf, only the purges ſhould not be too violent, nor the calomel given in too large doſes. In ſuch caſes, however, a perſeverance in the Solar and Lunar Tinctures alternately, as preſcribed in the Treatiſes round each bottle, may be depended on as the moſt eaſy, ſafe, ſpeedy, and elegant, cure.

## OF WEAKNESSES CONTRACTED BEFORE MARRIAGE.

THERE are ſome diſorders contracted by the fair ſex, the cauſe, and cure, of which are of ſuch a nature, that for ſeveral reaſons, chiefly through ſhame, they are likely to conceal them, and therefore may ſuffer worſe conſequences than can here be deſcribed. To tell, in few words, what I mean by ſuch diſeaſes as are contracted, they are all ſuch as the patient, by a criminal indulgence of her paſſions, has herſelf been inſtrumental in cauſing. For that many of the fair, eſpecially in their younger years, have ſuffered much from a ſecret vice, by which they have endeavoured to procure themſelves thoſe pleaſurable ſenſations which God has ordered to be the effects of a mutual commerce between the ſexes, is a matter of late become too notorious to be doubted, and too dreadful in its conſequences to be indulged in; I mean that abominable vice *onaniſm*, or ſecret venery. And certainly none of them can take it amiſs if, for their advantage, I venture ſo far to expoſe this practice, as to remove the evil conſequences of it; and to prevent, as much as poſſible, its continuance. The ſecret vice before-mentioned is chiefly a fault of the youth of both ſexes; and nothing is of more importance to the preſervation of human-kind in general, than the endeavouring to prevent a practice that ſtrikes at the very root of fecundity. Among the motives of this crime of ſelf-abuſe, the three following have, I think, with a great deal of juſtice, been aſſigned as the principal. Firſt, ignorance of its nature and conſequences. As to its nature, there is no expreſs prohibition of it; and therefore, many may unhappily be induced to imagine, when either by ill example, their own laſcivious inclinations, or any accidental cauſe, they have been betrayed into an acquaintance with the practice of it, that there can be no harm in procuring to themſelves that ſenſation, which, in their preſent circumſtances, they cannot otherwiſe acquire, without a manifeſt violation of the national laws, and the hazard of expoſing themſelves to ſhame and infamy. If it were not for this unfortunate miſtake, we have little reaſon to imagine, that perſons otherwiſe pious, and the moſt obſervant of what is ſeemly in other particulars, would be guilty of ſuch an offence, both againſt religion and decency. The caſe of Onan, however, whom God ſlew (*ſee Geneſis*, *chap.* xxxviii. *ver.* 9.) for thus wickedly defeating the purpoſes of generation, may anſwer the end of a precept, and witneſs the divine deteſtation of this kind of uncleanneſs. Nor is this example leſs applicable to women than it is to men, ſince we ſhall ſhew in the following inſtances, that they are as capable to render themſelves unapt, by ſimilar practices, for the buſineſs of procreation. And, as to its conſequences, they are no leſs fatal to this ſex than to the other, as will be abundantly ſhewn in the ſame inſtances. The ſecrecy with which this crime may be committed, is a ſecond inducement to it. There muſt be another party in all other acts of uncleanneſs; but in this, there is neither partaker nor witneſs. And this, above all other motives, ſeems to have been the moſt dangerous to women in particular, who are naturally more baſhful than men, and whom cuſtom alone has precluded from making any advances towards a mutual commerce with the other ſex. Thirdly, there is no ſpecific puniſhment to deter from this practice; but every one, who will, commits it with impunity. Adultery, in many countries, is puniſhed with death: and with us, it ſubjects a man to pecuniary fines, and inflicts eternal infamy on the woman who is known to be guilty of it. Even fornication, though regarded with leſs ſeverity, is yet moſt ſcandalous to the fair ſex in particular; eſpecially when they bring into the world, as the fruit of it, a living witneſs of their crime. But for ſelf-abuſe, there is no infliction, no other puniſhment, but ſelf-conſciouſneſs. And indeed, how can there be any other? The very nature of it, which renders it ſecure againſt detection, would fruſtrate any proviſion that could be made in this caſe by the legiſlature. And, beſides this ſecurity from legal animadverſion, it is ſafe from the conſequence which ſingle women muſt fear in their commerce with men, that of becoming pregnant. I might add, that ſome give into this way out of caution. They are loth to truſt their fortunes and prerogatives in the hands of a man, and therefore will not marry; and, as to unlawful embraces, they dare not venture on them for many reaſons. But I proceed to ſhew, that there can be no excuſe for a practice, which, beſides its wickedneſs, is the moſt prejudicial that can be to the human conſtitution. Its bad effects on the body are many and great. If practiſed often, it relaxes and ſpoils the retentive faculty. It occaſions the whites in women, and gleets in men. It ruins the complexion, and makes them pale, ſwarthy, and hagged. It produces a long train of hyſteric diſorders; and ſometimes, by draining away the radical moiſture, induces conſumptions. It brings on heats in the privities, belly, thighs, with ſhooting pains in the head, and all over the body. It ſometimes brings on that fatal malady, a *furor uterinus*, or, inſatiable appetite to venery. But what it is moſt liable to produce is barrenneſs, by cauſing an indifference to the pleaſures of Venus, and in time, a total inability or inaptitude to the act of generation itſelf. Virgins, who indulge themſelves over eagerly in this abuſe of their bodies, deflower themſelves, and deſtroy the valuable badge of their chaſtity, which it is expected they ſhould not part with before marriage; but which, when loſt, can never be retrieved. With regard to maids, who have hereby deprived themſelves of that ſacred badge, the loſs of which, before marriage, was ſo ſeverly puniſhed among the Jews; under what apprehenſions muſt they continually lie!---with what terrors muſt they approach the marriage-bed, which heaven has deſigned for the ſeat of the higheſt ſenſible enjoyment!---when they reflect that their virtue, on the firſt amorous encounter, is liable to ſuch ſuſpicions, as may never be worn off, but which may render uncomfortable the whole life, both of her and her otherwiſe affectionate huſband! But, beſides this diſgrace, ſuppoſe women have actually entered with reputation in all other reſpects on the conjugal ſtate, how muſt it grieve them, when they find the ends of it unanſwered, and have room to charge their inaptitude to procreation on their own fault! Both huſband and wife, perhaps, may be paſſionately deſirous of iſſue; and the good man may think it a defect in himſelf, that their nuptial embraces are perpetually fruitleſs. But where a woman can charge herſelf with ſuch a courſe of ſelf-abuſe, as hath ſenſibly weakened and debilitated her organs of generation, hath ſhe not all the room in the world to be for ever unhappy, in the remembrance of her folly and wickedneſs; and to believe, with juſtice, that another woman in her caſe would not be infertile? How much more tormenting muſt it be, if, beſides her having rendered ineffectual the uſe of the marriage-bed, ſhe feels in herſelf no inclination to the enjoyment of it, and is thereby not only inſenſible as to her own particular, but makes imperfect to her huſband that exquiſite pleaſure, which ought to reſult from their mutual embraces! Suppoſing neither of the aforeſaid calamities to befal her, but that ſhe is capable of bringing forth heirs to her huſband; yet, if ſhe is conſcious of having weakened her body, and brought on herſelf a miſerable train of pains and infirmities, what anxiety, what remorſe, muſt not a woman endure on that account! Every guilty female, who finds in herſelf any of the diſmal ſymptoms here enumerated, will not readily forget what ſenſibly affects her; nor will ſhe eaſily forgive herſelf thoſe unnatural ſallies, whoſe fatal conſequences reſt heavily upon her, and abridge her of half thoſe enjoyments, which her ſex, her conſtitution, and the various benefits of nature, had made her capable of partaking. What I have already ſaid, if duly attended to, will be ſufficient to render this practice deteſtable; to deter the young, and hitherto innocent, from making themſelves miſerable, and to ſtop the courſe of thoſe who have already advanced far in the road to deſtruction. A ſudden and reſolute ſtand, to all old offenders, is what I would in the firſt place ſeriouſly adviſe, as the moſt eſſential ſtep towards reſtoring to themſelves a ſound conſtitution, and that peace of mind which they cannot otherwiſe enjoy. There are few caſes ſo bad, but what, if taken in any reaſonable time, a due regimen and the proper uſe of medicines may be effectual in the relief of. Let the guilty reſolve then, that they will do ſo no more. Let them, as much as poſſible, abſtain from every thought, but eſpecially from every action, that may raiſe irregular deſires. Let them, when any way tempted, reflect on the miſerable condition of many, who, in galloping conſumptions, have died terrible examples to all thoſe who perſiſt in this vice. As the moſt uſual complaints of thoſe who have been guilty of this practice, regard the weakneſs and infertility of the parts, they muſt have recouſe to the medicines hereafter preſcribed for barrenneſs; but, if a conſumptive habit be induced, then muſt the patient be treated as directed under that head.

## OF THE FUROR UTERINUS.

THE *furor uterinus* is ſuch a particular complication of hyſterical ſymptoms, from an extraordinary fulneſs or inflammation of the veſſels of the womb, as forms a ſort of madneſs, wherein the patient is preternaturally diſpoſed, or involuntarily excited, as it were, to venereal embraces. It is a diſtemper not very freqnent, but which ſometimes happens. The ſigns of it are very manifeſt, both by the geſtures of the body and the tendency of the patient's diſcourſe; which, how great ſoever her natural modeſty may be, will be extravagantly lewd. The cauſes of this diſeaſe are uſually the ſame with thoſe of other hyſterical diſorders; but, by falling on the organs of generation, are more violent in their effects. A vigorous, healthy, and ſanguine, conſtitution, high feeding, want of exerciſe, or a mixed converſation, may diſpoſe to it: as may alſo too large a doſe of cantharides, and other provocative medicines; or indulging vehement deſires, and too great familiarity, but ſhort of enjoyment, with the other ſex. Some time before the fit, the patient often appears ſilent and ſorrowful, with a baſhful, down-caſt, look, and an unuſual fluſhing all over the face. Her pulſe is irregular, varying from high and ſtrong to low and weak, and then growing ſtrong again of a ſudden: ſhe breathes alſo now thick and ſhort, and then with long intervals, heaving it out, as it were, with a ſigh. Theſe ſymptoms increaſe gradually, till the fit actually comes on: then the patient burſts out into a fit of crying, when the tears are plentifully ſhed; if a man comes in her way, ſhe is apt to lay hold of him, and treat him with indecent fondneſs. In fine, thoſe who labour under this diſorder appear to be mad by intervals, and ſay and do a thouſand things which they are unconſcious of when the fit is over. If the ſymptoms are violent, the fits frequent and of long continuance, and eſpecially if the patient be of a ſanguine conſtitution, unmarried, and the caſe originally proceeds from a fixed amour, it is difficult of cure, and ſometimes degenerates into a continued madneſs. But if the diſtemper proceeds from an obſtruction or ſuppreſſion of the monthly courſes, from too great a quantity of blood, or from a too indulgent life, it is more eaſily remedied. The perſon thus afflicted ſhould be removed into a clear and open air, if ſhe be not in ſuch already; and, if ſhe be, a change perhaps may be of ſervice. Her diet ſhould be thin and cooling, and not taken in large quantities: her exerciſe, between the fits, moderate. Let her be kept, as much as poſſible, from the company of men; and eſpecially, if love be the ſuſpected cauſe, from that man whom ſhe is known to regard, unleſs it be to bring them entirely togethe, and cure the diſeaſe by removing its origin. During the fit, bleed directly, and that in a conſiderable quantity, eſpecially if any evacuations have been ſuppreſſed; afterwards exhibit the following opiate: Take black-cherry water and white-wine vinegar, of each an ounce; camphire half a ſcruple; white ſugar, two ounces; liquid laudanum, forty drops: mix them well, for a ſingle draught: alſo, take ſpring-water, twelve ounces; lemon-juice and white-wine vinegar, of each one ounce and a half; white ſugar, a ſufficient quantity to make it palatable: mix them well, and let her uſe it for common drink. Take milk, half a pint; tincture of aſſafœtida, two ounces; camphire, ſugar of lead, and troches of myrrh, of each two drachms: mix them, and inject cold into the privities with a proper inſtrument. If theſe fail of ſucceſs, repeat the opiate; and, if the fit ſtill increaſe, let the patient be had to the cold bath. Bliſtering alſo has been found ſerviceable to ſome women. A whey diet, together with the uſe of the cold bath continued for a month or two, are excellent; and, during all this time, clyſters and injections may be uſed between whiles, made according to the form above, without any mixture of more ſtimulating ingredients. When this diſeaſe degenerates into a madneſs, it muſt be treated accordingly, and the beſt advice ſhould immediately be had: for, if it remains long in a confirmed ſtate, it will ſeldom admit of a cure.

## OF CONCEPTION OR PREGNANCY.

WHEN almighty God created the world, he ſo ordered and diſpoſed of the *materies mundi*, that every thing produced from it ſhould continue ſo long as the world ſhould ſtand. Not that the ſame individual ſpecies ſhould always remain; for they were in proceſs of time to periſh, decay, and return to the earth from whence they came; but that every like ſhould produce its like, every ſpecies produce its own kind, to prevent a final deſtruction of the ſpecies, or the neceſſity of a new creation. For which end he laid down certain regulations, by which each ſpecies was to be propagated, preſerved, and ſupported, till, in order and courſe of time, they were to be removed hence; for, without that, thoſe very beings, which were created at firſt, muſt have continued to a final diſſolution of all things; which Almighty God, of his infinite wiſdom, did not think fit. But, that he might ſtill the more manifeſt his omnipotence, he ſet all the engines of his providence to work, by which one effect was to produce another, by means of certain laws or rules, laid down for the propagation, maintenance, and ſupport, of all created beings. This his divine providence is called nature, and theſe regulations are called the laws of nature, by which it ever operates in its ordinary courſe, producing conception and generation of all things, as it were, from the beginning.

The proceſs of generation of the human ſpecies, ſo far as the male contributes to it, is as follows: the penis being erected by an effuſion of blood; the glands at the ſame time tumefied; and the nervous papillæ in the glands much rubbed, and highly excited, in coition; an ejaculatory contraction follows, by which the ſeed is preſſed out of the ſeminal veſicles, and expelled with ſome conſiderable force. The proceſs of generation on the part of the female is thus: the clitoris being erected, after the like manner as the penis in the man; and the neighbouring parts all diſtended with blood; they more adequately embrace the penis in coition; and, by the intumeſcence, preſs out a liquor from the glands about the neck of the womb, to facilitate the paſſage of the penis. At the ſame time, the fibres of the womb, contracting, opens its mouth (which at other times is extremely cloſe) for the reception of the finer part of the ſeed.

From this contact of the ſexes, follows *conception*, or the production of an *embryo*, which is effected in the following manner: In the ſuperfices of the teſticles or ovaries of women there are found little pellucid ſpherules, conſiſting of two concentric membranes, filled with a lymphatic humour, and connected to the ſurface of the ovaria, underneath the tegument, by a thick calix, contiguous to the extremities of the minute ramifications of the Fallopian tubes. Theſe ſpherules, by the uſe of venery, grow, ſwell, raiſe, and dilate, the membranes of the ovary into the form of papillæ; till the head, propending from the ſtalk, is at length ſeparated from it; leaving it a hollow cicatrix, in the broken membrane of the ovary; which, however, ſoon grows up again. Now, in theſe ſpherules, while ſtill adhering to the ovary, fœtuſes have been frequently found: whence it appears, that theſe are a kind of ova or eggs, deriving their ſtructure from the veſſels of the ovary, and their liquor from the humours prepared therein. Hence, alſo, it appears, that the Fallopian tubes, being ſwelled and ſtiffened by the act of venery, with their muſcular fimbriæ, like fingers, may embrace the ovaries, compreſs them, and by that compreſſion expand their own mouths: and thus the eggs, now mature, and detached as before, may be forced into their cavities; and thence conveyed into the cavity of the uterus; where they may either be cheriſhed and retained, as when they meet with the male ſeed; or, if they want that, again expelled. Hence the phænomena of falſe conceptions, abortions, fœtuſes found in the cavity of the abdomen, the Fallopian tubes, &c. For, in coition, the male ſeed, abounding with living animalcules, agitated with a great force, a briſk heat, and probably with a great quantity of animal ſpirits, is violently impelled through the mouth of the uterus, which on this occaſion is opener, and through the valves of the neck of the uterus, which on this occaſion are laxer than ordinary, into the uterus itſelf; which now, in like manner, becomes more active, turgid, hot, inflamed, and moiſtened with the flux of its lymph, and ſpirits, by means of the titillation excited in the nervous papillæ by the attrition againſt the rugæ of the vagina. The ſemen thus diſpoſed in the uterus, is retained, heated, and agitated, by the convulſive conſtriction of the uterus itſelf; till, meeting with the ova, the fineſt and moſt animated part enters through the dilated.

ſated pores of the membranula of the ovum, now become glandulous, is there retained, nouriſhed, dilated, grows to its umbilicus, or navel; ſtifles the other leſs lively animalcules; and thus is conception effected.

The egg in the ovarium of a woman, when impregnated with the male ſeed, may be compared to the ſmall round white ſpot of the ſize of a ſmall pea on the yolk of a hen's egg; in which ſmall part, if it is impregnated, the chicken begins to form, and which is commonly called the tread; though this part is always to be found in the eggs of thoſe hens that have not cohabited with the cock, but ſmaller, and theſe, not having received the male ſeed, produce no chickens. Therefore ſince an egg is ſo nearly completed in a hen without communication with a cock, and ſince there are parts in a woman equally adapted for this purpoſe; it may be preſumed, that the unimpregnated egg of a woman, when it proceeds from the ovarium, conſiſts of thoſe parts which are the rudiments of the fœtal part of the placenta, and membranes; and, moſt likely, a part, at leaſt, of the rudiments of the child itſelf; and may be called the ovarial portion, which then impregnated by the addition of the male ſeed, and afterwards conveyed into the womb, acquires a further addition from the womb itſelf; which may be called the uteral portion; but, if not impregnated, it is diſcharged from the womb without any further growth. The firſt thing that appears of a fœtus, is the placenta, like a thick cloud, on one ſide of the external coat of the egg: about the ſame time the ſpine is grown big enough to be viſible; and a little after the cerebrum and cerebellum appear like two ſmall bladders: next, the eyes ſtand prominent in the head: then the punctum ſaliens, or pulſation of the heart, is plainly ſeen. The extremities diſcover themſelves laſt of all. The formation of the bones in a fœtus is very gradual and regularly performed. In the firſt two months there is nothing of a bony nature in the whole; after this, the hardneſs of the parts where the principal bones are to be ſituated becomes by degrees perceptible. Dr. Kerkring deſcribes the progreſs of the oſſification from ſkeletons which he had prepared from fœtuſes of two months, and thence up to nine. In the firſt two months, or till the end of that time, there appears not any thing bony; after this, in the third and fourth months, and ſo on, the ſeveral parts, one after another, acquire their bony nature. In the firſt ſtages every thing is membranous, where the bones are to be; theſe by degrees tranſmigrate into cartilages; and from theſe, by the ſame ſort of change continued, the bones themſelves are by degrees formed. All this is done by nature, by ſuch ſlow though ſuch certain progreſſions, that the niceſt eye can never ſee it doing, though it eaſily ſees it when done.

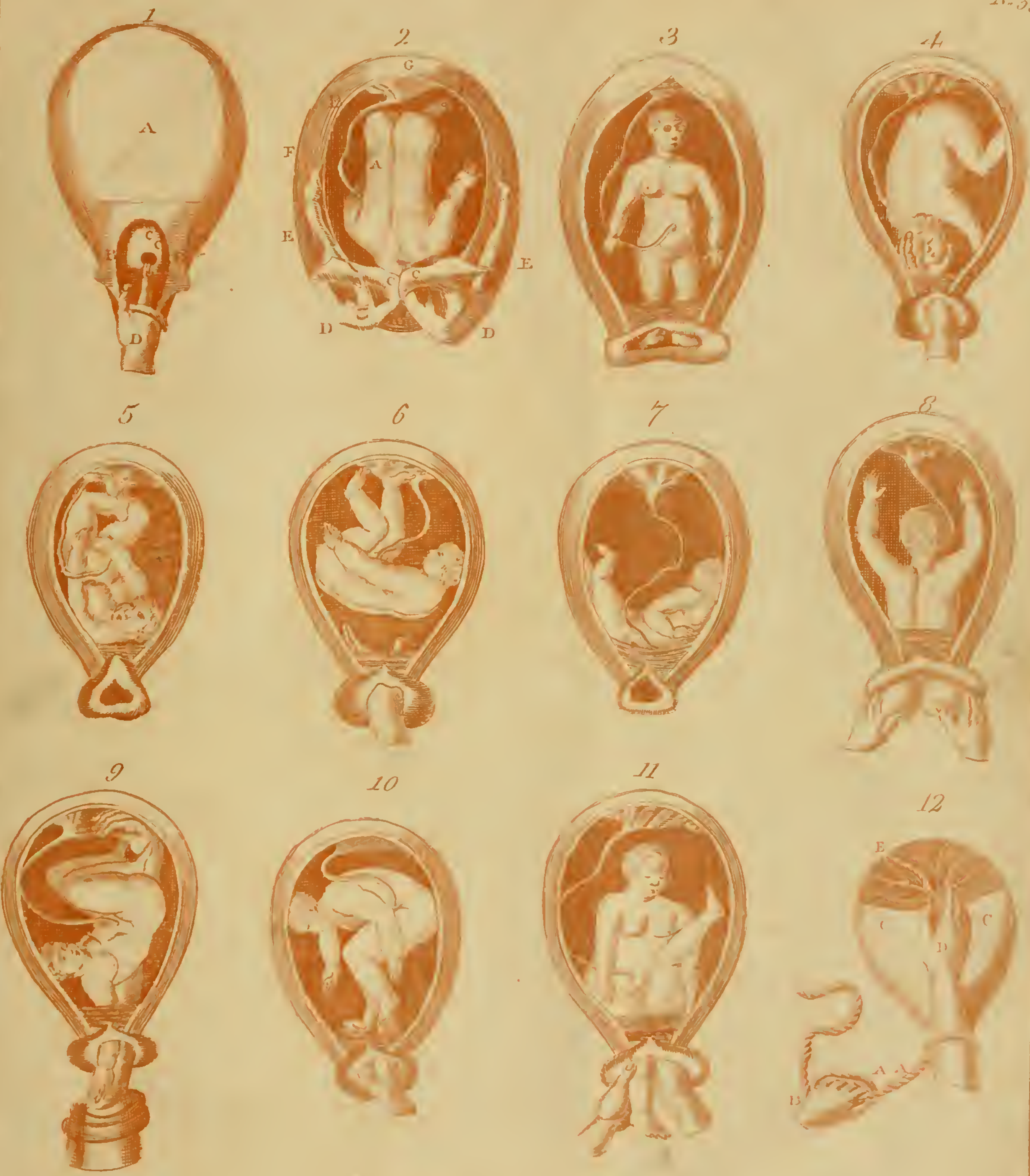
Though the ſtate of pregnancy is not a diſeaſe, yet it is attended with a variety of complaints which merit great attention, and often require the aſſiſtance of medicine.

Some women indeed are more healthy during their pregnancy than at any other time; but this is by no means the general caſe: moſt of them breed in ſorrow, and are frequently indiſpoſed during the whole time of pregnancy. Few fatal diſeaſes, however, happen during that period; and hardly any, except abortion, that can be called dangerous. Every pregnant woman is more or leſs in danger of abortion. This ſhould be guarded againſt with the greateſt care, as it not only weakens the conſtitution, but renders the woman liable to the ſame misfortune afterwards. Abortion may happen in any period of pregnancy, but it is moſt common in the ſecond or third month; ſometimes however it happens in the fourth or fifth. If it happens in the firſt month, it is uſually called a falſe conception; if after the ſeventh month, the child mav be often kept alive by proper care. The common cauſes of abortion are---the death of the child, weakneſs or relaxation of the mother, great evacuations, violent exerciſe, jumping or ſtepping from an eminence, vomiting, coughing, convulſion-fits, ſtrokes on the belly, falls, fevers, diſagreeable ſmells, exceſs of blood, indolence, high living or the contrary, violent paſſions or affections of the mind, as fear, grief, &c. When any ſigns of abortion appear, the woman ought to be laid in bed on a mattraſs, with her head low. She ſhould be kept quiet, and her mind ſoothed and comforted. She ought not to be kept too hot, nor to take any thing of a heating nature. Her food ſhould conſiſt of broths, rice and milk, jellies, gruels made of oat-meal, and the like, all of which ought to be taken cold. If ſhe be able to bear it, ſhe ſhould loſe, at leaſt, half a pound of blood from the arm. Her drink ought to be barley-water, ſharpened with juice of lemon; or ſhe may take half a drachm of powdered nitre, in a cup of water-gruel, every five or ſix hours. If the woman be ſeized with a violent looſeneſs, ſhe ought to drink the decoction of calcined hartſhorn prepared. If ſhe be affected with vomiting, let her take frequently two table-ſpoonfuls of the ſaline mixture. In general, opiates are of ſervice, but they ſhould always be given with caution. Sanguine robuſt women, who are liable to miſcarry at a certain time of pregnancy, ought always to be bled a few days before that period arrives. By this means, and obſerving the regimen above preſcribed, they might often eſcape that misfortune.

## OF CHILD-BIRTH.

THOUGH the management of women in child-bed has been practiſed an an employment ſince the earlieſt accounts of time, yet it is ſtill, in moſt countries, on a very bad footing. Few women think of following this employment till they are reduced to the neceſſity of doing it for bread. Hence not one in a hundred of them have any education, or proper knowledge of their buſineſs. It is true, that nature, if left to herſelf, will generally expel the fœtus; but it is equally true, that moſt women in child-bed require to be managed with ſkill and attention, and that they are often hurt by the ſuperſtitious prejudices of ignorant and officious midwives. The miſchief done in this way is much greater than is generally imagined; moſt of which might be prevented by allowing no women to practiſe midwifery but ſuch as are properly qualified. Were due attention paid to this, it would not only be the means of ſaving many lives, but would prevent the neceſſity of employing men in this indelicate and diſagreeable branch of medicine, which is, on many accounts, more proper for the other ſex. In order to obtain a perfect idea of the proceſs of delivery, and to form a competent knowledge of difficult child-births, it is neceſſary we ſhould firſt underſtand thoſe that are natural. The time of the natural birth is from the 15th day of the ninth month to the end of the 30th of the ſame: yet ſome women affirm it may be ſooner or later. Hoffman ſays, the uſual time is nine ſolar months; and Junker, that, excretions from the uterus being by women referred to certain lunar phaſes, they reckon their going with child by the weeks, and that they uſually exclude the fœtus forty weeks from the time of their being with child, commonly on that very day they were uſed to have their menſes. When this time is arrived, which may be known by a remarkable deſcent of the womb, and a ſubſidence of the belly, the fœtus is mature for delivery; it then turns round, and its head falls towards the orifice of the womb, as in the annexed plate, where A A denotes the portion of the chorion diſſected and removed from its proper place; B a portion of the amnios; C C the membrane of the womb diſſected; D D the placenta endued with many ſmall veſſels by which the infant receives its nouriſhment; E E the varication of the veſſels which makes up the navel-ſtring; F F the navel-ſtring, by which the umbilical veſſels are carried from the placenta into the navel; G G the infant as it lieth perfect in the womb ready for delivery; H the inſertion of the umbilic veſſels into the navel of the infant. The orifice of the womb dilates by the weight and preſſure of the child; and the chorion and amnios, being driven forward with the waters they contain, form a kind of pouch or bladder at the ſaid orifice; which ſhould be ſuffered to break of itſelf, or at leaſt it ſhould not be burſt till the woman is in labour. There is a flux of whitiſh matter from the ſaid orifice; pains which extend from the loins and groin towards the genital parts: there is a frequent deſire to make water, or a continual inclination to go to ſtool; a flux of the waters from the membranes which contain the child immediately before the birth, or more early: a trembling of the lower joints; ſometimes the head achs, and the face looks intenſely red. In this ſtate of things, the midwife ought to examine the ſtate of the uterus, and relax the vagina by ſome oily and mollifying remedy, which ought to be kept in readineſs; ſhe ſhould likewiſe examine by the touch, with the fore and middle fingers, introducing them from time to time into the orifice of the womb, to diſcern whether it be dilated, contracted, or in an oblique or ſtraight direction; from whence a judgment may be formed whether it will come eaſily, or difficultly, &c. as repreſented in No. 1. of the annexed plate, where A denotes the uterus; B B the vagina laid open; C C the os uteri internum, as yet contracted, but in its right ſituation; D repreſents the manner of examining the os uteri with one or more of the fingers, which if obliquely ſituated either forwards towards the os pubis, backwards on the os ſacrum, or towards either ſide, denotes a difficult delivery. As the infant gradually advances, the above-mentioned protuberance continually enlarges the paſſage, till the crown of the head may be felt; the birth is then ſaid to be advanced one third, and the midwife may now aſſiſt the excluſion. When the infant is advanced forward as far as his ears, he is ſaid to be in the paſſage, as ſhewn in No. 2. of the annexed plate, which repreſents the natural poſture of the infant in the birth, with its head protruding into the os uteri, under the arch of the os pubis; A the infant, B B the womb laid open, C C the oſſa pubis, D D the oſſa iſchii, E E the oſſa ilei, F the navel-ſtring, G the ſecundines adhering to the womb. If the membranes are not already burſt, they may now be opened, and the waters, by their effuſion, will render the vagina ſlippery, and promote the expulſion of the infant. When the child is born, the midwife ſhould lay it on her knees ſo as to give iſſue to the waters from the mouth, if any have been imbibed: ſoon after, the placenta appears of itſelf, if not attached to the uterus: if otherwiſe, the midwife muſt ſeparate it gently, by introducing her hand. The navel-ſtring muſt now be cut, having firſt made a ligature as well on the child's ſide as on the mother's to prevent an hæmorrhage. After the child is born, and the after-birth brought away, let a warm linen cloth be applied to the parts, but not ſo as to hinder the flowing of the lochia. An hour after, let the mother take a little oil of ſweet almonds, to eaſe the after-pains, and let a cataplaſm of the oil of ſweet almonds two ounces and two or three new-laid eggs be boiled together, and laid to the parts, renewing it every ſix hours, for two days: fifteen days after the birth, the parts may be bathed with an aſtringent decoction of red roſes, balauſtines, or nut-galls, in red wine, in order to brace them. If the labour is long and difficult, it will be proper to bleed, to prevent inflammations, and to give a little Alicant wine, with the addition of cinnamon, or confectio alkermes.

A difficult delivery is ſometimes brought on by the mother, the midwife, or the fœtus. The fault is in the mother, if, when the orifice of the womb is open, and the child rightly placed, ſhe has not ſtrength to expel the fœtus, eſpecially if the waters are come away, and the pains ceaſe; or when the mother will not exert herſelf; or there is a natural fault in the genital parts. In a defect of ſtrength or pains, all elſe being right, a draught of generous wine ſhould be given, with cinnamon and mace, N.° 39.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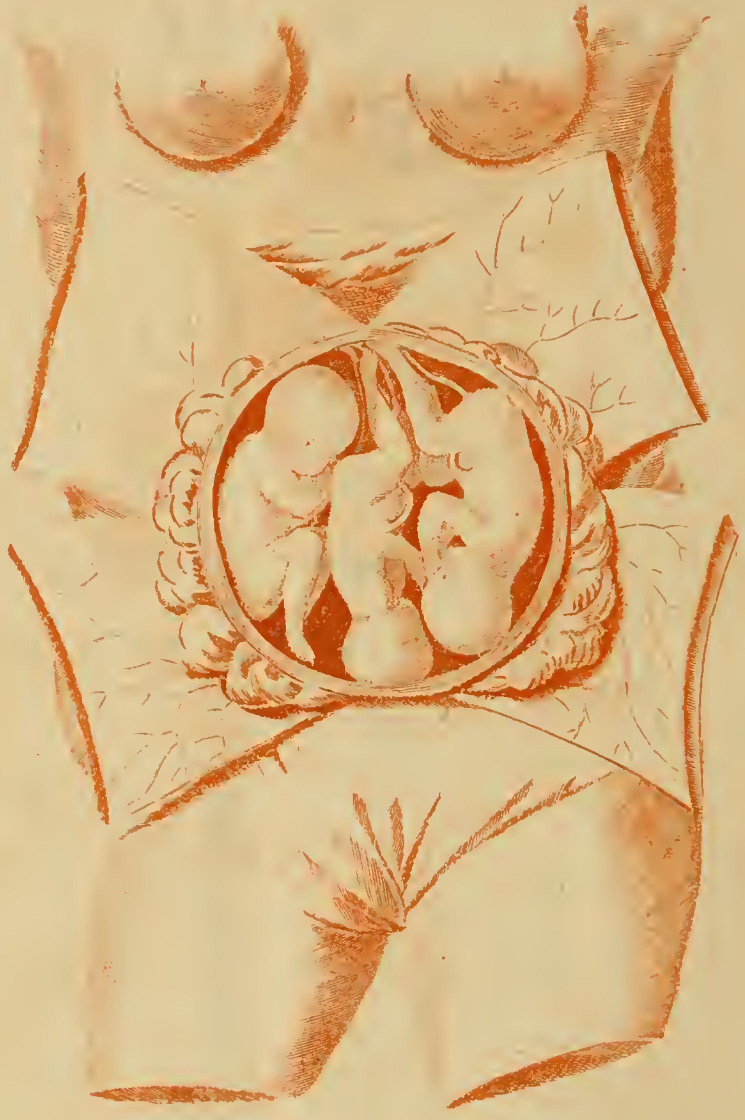
Proceſs of Delivery.

again and again, if the work does not go forward. If there wants a great ſtimulus, borax, cinnamon, or myrrh, may be given, with a proper drink, which muſt be repeated in an hour or two, if occaſion requires. But the abuſe of forcing medicines is dangerous: ſtimulating clyſters may be injected now and then, eſpecially if the woman is coſtive. The midwife ſhould alſo preſs back the os coccygis, which tends to excite the pains, and to eaſe the labour. If the parts are over ſtrait, as in the firſt birth, eſpecially if the woman is not young, emollient liniments are to be uſed, and the parts muſt be anointed with freſh butter, or oil, and be dilated gently with the fingers. If there is a tumour, caruncle, or membrane, oppoſing the birth, a ſurgeon's aſſiſtance is required. The midwife is in fault, when ſhe haſtens the labour before the time, when there are no true pains, when the orifice of the uterus is not open, which alone diſtinguiſhes the true pains from falſe: the true time of birth muſt be waited for: the woman muſt be compoſed, and her ſpirits kept up with comfortable liquors. If the fault is with the fœtus, and the head too large, or the ſhape monſtrous, or the ſituation preternatural, then forcing medicines are fruitleſs and noxious; and the fœtus muſt be brought forth by the feet, by a ſkilful hand, or the inſtrument called embryulcus, as in No. 9. of the annexed plate, whether alive or dead. If the feet preſent firſt, as in No. 3. the midwife muſt be wary, leſt there be twins, and leſt ſhe ſhould take a foot of each: the feet muſt be wrapped in a dry napkin, and the child muſt be drawn gently, till the waſte is in the orifice of the uterus: then the infant's hands ſhould be drawn cloſe by the ſides; and, if the noſe be towards the os pubis, it ſhould be turned towards the coccyx, to prevent an obſtacle. Then, the orifice muſt be dilated with the fingers, and the woman's throws ſhould aſſiſt the midwife's efforts to educe the child. If the chin is embarraſſed, the midwife muſt diſengage it, by putting her finger into the mouth, in order to turn it to advantage. If the infant's head preſents acroſs, as in No. 4. it muſt be put back, and gently turned to its natural ſituation; and if the ſhoulder or back preſents, as in No. 5. and 6. the ſame art muſt be uſed. If the belly, hip, or thigh, appears firſt, as in No. 7. and 8. the child muſt be extracted by the feet, and the mother muſt lie horizontally on her back. If one or both hands are directed upwards, and lie cloſe to the head, the caſe is not ſo bad as ſome apprehend, for they will keep the orifice dilated, till the head paſſes, and prevents ſtrangling. If one leg, or the feet and hands, appear, they muſt be returned, and the infant brought forth by the feet, as in No. 10. and 11. If the infant is dead, there is generally a collapſion of the abdomen; the breaſts are flaccid; the infant bears on the lower part of the pelvis: and the child, upon motion, rolls like a lump of lead. The bones of the ſkull are wrapped over one another; an ichorous ſymphatic ſanies flows from the uterus; the mother is ſubject to fainting. There is no pulſation in the navel-ſtring; it is ſoft and indolent to the touch, and abſolutely deprived of motion. If the placenta comes firſt, and is hot, the child is alive. Above all, if any part of the infant's body appears, and is full of ſmall-veſicles, livid, ſoft, and brittle, it is not only dead, but beginning to putrefy. In theſe caſes it muſt be extracted by the feet, and, if it cannot be done otherwiſe, with an inſtrument; but a man-midwife's aſſiſtance muſt not be neglected. When the fœtus dies before the time of birth, and the membranes continue whole, it will not putrefy; therefore the work muſt be left to nature, for birth-pains will at length come on ſpontaneouſly. If the navel-ſtring appears firſt, and is compreſſed ſoon after by the head of the infant, its life is in danger, and the remedy is to return the infant, and reduce the cord, till the head fills the orifice; but, if this cannot be done, the woman muſt be put in a ſuitable poſture, and the child muſt be extracted by the feet. When the placenta preſents itſelf, which is known by its ſpungy, ſoft, texture, and the great quantity of blood flowing at the ſame time, it requires ſpeedy aſſiſtance. If the membranes are entire, they ſhould be broken; the placenta and membranes ſhould be reduced into the uterus, and the child be extracted by the feet; which is more eaſily performed in the membranes than in the uterus, and put into a proper ſituation: but, if the placenta is diſengaged from its membranes, and theſe are broke, and the placenta, or both, appear before the infant, they may be brought away firſt, and the infant immediately afterwards. When there is a great flux of blood from outward accidents, the infant ſhould be immediately delivered by art, though the mother is not in true labour. If the uterus is opened, and the vagina relaxed, as in this caſe they commonly are, the child muſt be extracted by the feet; if not, they muſt be mollified with freſh oil, and the infant delivered as before. After all laborious births, the woman is generally weak, and apt to faint: therefore her ſpirits ſhould be kept up by a glaſs of hot wine, or analeptic water, which muſt be repeated as oft as there is occaſion. If, after the child is born, the placenta does not ſoon follow, and it adheres to the womb, the woman is not to change her poſture immediately, but the midwife's hand is to be introduced into the womb, as far as the placenta, taking the navel-ſtring for a guide; and, taking hold of it, ſhe is to move it gently to and fro, in order to looſen and extract it. If it adheres too cloſely, it is not to be pulled forcibly, or broken: it will be beſt to wait half an hour, keeping the hand in the uterus, for fear of its cloſing, till it comes away of itſelf, or may be ſeparated without force, as in No. 12. which exhibits the method of ſeparating and extracting the placenta from the womb, when it does not eaſily follow the infant. There the navel-ſtring A A is held by the left hand B, while the right hand D is thereby guided in the collapſed uterus C C to the placenta E, which is hereby ſeparated from the uterus. If, through the unſkilfulneſs of the midwife, the orifice of the womb cloſes before it is come

away,

No. 16



*Poſition of the Embryos in a plural Conception.*

Dodd Delin.

[illegible] Sculp.

away, aloetic pills muſt be taken every evening. If it putrefies, the patient dies, or falls into dangerous fevers. After delivery, the woman ſhould be put into bed, and a folded ſheet put under her hips, in order to receive the lochia. Warm linen ſhould be applied to the genital parts, to keep out the air, and a compreſs, dipped in warm wine, ſhould be applied to the belly, but not too tight. If there are violent pains after delivery, they generally proceed from the after-birth's being retained, or part of it; from blood clotted, or concreted, in the uterus; from hard labour; from a defect in the flux of the lochia; or from wind, eſpecially if the woman has not been ſwathed in a proper way. In this caſe, hot diluents are proper, or an infuſion of camomile-flowers, drunk as tea, or broths with carraway-ſeeds; or wormwood, or thin orange-peel one ounce, or a bitter tincture in a proper infuſion, taken hot. An ounce or two of oil of ſweet almonds, taken in a hot vehicle, is alſo excellent.

If violent pains continue after delivery of the child, ſo as to give ſuſpicion of more being left behind, the greateſt care and circumſpection ſhould be uſed in examining the ſtate of the uterus, and watching an opportunity to extract them in thoſe favourable moments when the efforts of nature and the mother's throws mutually conſpire to promote the birth; and in which the utmoſt ſkill and caution are requiſite, or both mother and offſpring are liable to periſh. Theſe caſes, when they happen, are generally attended with the more difficulty from the midwife not knowing the uſual poſition of a plural conception. I have therefore given the annexed plate of a recent caſe, where three children were ſafely delivered, who, with the mother, are all in a fair way of doing well.

The moſt fatal diſorder conſequent upon delivery is the *puerperal* or child-bed fever; and there is not any diſeaſe that requires to be treated with more ſkill and attention than this; conſequently the beſt aſſiſtance ought always to be obtained as ſoon as poſſible. In women of plethoric conſtitutions, bleeding will generally be proper at the beginning; it ought however to be uſed with caution, and not to be repeated unleſs where the ſigns of inflammation riſe high; in which it caſe it will alſo be neceſſary to apply a bliſter to the region of the womb. During the rigour, or cold fit, proper means ſhould be uſed to abate its violence, and ſhorten its duration. For this purpoſe the patient may drink freely of warm diluting liquors, and, if low, may take now and then a cup of white-wine whey; warm applications to the extremities, as heated bricks, bottles or bladders filled with warm water, and ſuch-like, may alſo be uſed with advantage. Emollient clyſters of milk and water, or of chicken water, ought to be frequently adminiſtered through the courſe of the diſeaſe. Theſe prove beneficial by promoting a diſcharge from the inteſtines, and alſo by acting as a kindly fomentation to the womb and parts adjacent. Great care however is requiſite in giving them, on account of the tenderneſs of the parts in the pelvis at this time. The medicine always found to ſucceed beſt in this diſeaſe is the Lunar Tincture. This, if frequently repeated, will often put a ſtop to the vomiting, and at the ſame time leſſen the violence of the fever. If it runs off by ſtool, or if the patient be reſtleſs, a few drops of laudanum, or ſome ſyrup of poppies, may occaſionally be added. To avoid this fever, every woman in child-bed ought to be kept perfectly eaſy; her food ſhould be light and ſimple, and her bed-chamber cool, and properly ventilated. There is not any thing more hurtful to a woman in this ſituation than being kept too warm. She ought not to have her body bound too tight, nor to riſe too ſoon from bed, after delivery; catching cold is alſo to be avoided; and a proper attention ſhould be paid to cleanlineſs. To prevent the milk-fever, the breaſts ought to be frequently drawn; and, if they are filled previous to the onſet of a fever, they ſhould, upon its firſt appearance, be drawn, to prevent the milk from becoming acrid, and its being abſorbed in this ſtate.

## DISEASES OF INFANTS.

IT is proper immediately after children are born, to ſearch narrowly whether they have received any injury, either in the womb, or in the delivery itſelf. Bruiſes in the head, or elſewhere, occaſioned by the rough treatment of the midwife, and ſwellings, occaſioned by a preſſure againſt the internal orifice, may be cured or diſcuſſed by the following mixture: Take camphorated ſpirit of wine and oil of ſweet almonds, of each two drachms; compound ſpirit of lavender, half a drachm: mix. Let the injured part be frequently anointed therewith. It may alſo be now and then fomented with warm milk. But, if the ſwelling tends to ſuppuration, it ought to be immediately forwarded with mucilage plaiſter, diachylon with gum, or a poultice of bread and milk. And, after the diſcharge of matter, uſe Arcæus's liniment, warm, and mixed with a little Peruvian balſam, for the dreſſings, covering them with a ſimple diachylon plaiſter.

The *gripes* in children ſometimes prove ſo violent, as to throw them into univerſal convulſions, or to cauſe what is called a convulſion of the bowels. When the diet is ſuſpected to cauſe this diſorder, it is uſual to boil carraway-ſeeds, and laurel-leaves along with the panada, or to mix with it a little wine or brandy. If the meconium has not been duly purged away, five grains of rhubarb ſhould be given twice a week, till the bowels are evacuated; or a little oil of ſweet almonds, and ſyrup of violets, where the infant is weak. When the taking in too much milk is ſuſpected to be the cauſe, let it be debarred the breaſt a ſhort time, and in the mean while exhibiting the following mixture: Take ſyrup of peach bloſſoms and rhubarb, of each half an ounce; of anniſeſeed, two drops: mix. Let a ſmall ſpoonful of this be given occaſionally, while the ſymptoms laſt. When the curdling of the milk cauſes the gripes, proceed as follows: Take rhubarb powdered fine, and magneſia alba, of each ten grains; oil of anniſeſeed, one drop: mix. Give half this for a purge, in a ſpoonful of the mother's milk, and repeat the doſe two or three times if there be occaſion. When worms are the cauſe of the gripes, the readieſt way to remove them is by giving Ethiop's mineral and rhubarb mixed in equal quantities, about five grains at a time, twice a-day. If wind be the cauſe, the belly of the child may be anointed with a mixture of two parts oil of ſweet almonds, and one part French brandy; wrapping the part up warm afterwards, with a flannel.

The ſymptoms of *cutting teeth* generally begin about the fifth or ſixth month, at which time ſome of the fore teeth riſe, and occaſion great pain, or even convulſions. Children have then commonly an itching, heat, pain, and ſwelling, in the gums; their ſpittle riſes much; they are reſtleſs and feveriſh, ſometimes looſe, and ſometimes coſtive. A few day's before any tooth is cut, the gum immediately above it appears thin and whitiſh, its ſides being ſwelled and inflamed. Children of groſs habit, and who breed their teeth with coſtiveneſs, are generally in moſt danger. The following mixture, given occaſionally, will mitigate the pain, during the cutting of teeth: Take black cherry-water, two ounces; compound piony-water, two drachms; confection of kermes, two ſcruples; Sydenham's liquid laudanum, fifteen drops: mix. Let one ſpoonful be given at a time, when the child is very reſtleſs.

Thoſe little ulcerous eruptions in the mouth called the *thruſh*, which ſometimes appear early, and ſometimes not till the third or fourth year, are accounted dangerous when joined with a fever, and are always troubleſome. The child here ſhould be kept moderately cool, as in a common fever, and a ſmall bliſter may be applied to the neck, if the diſorder be great. In the mean time uſe the following julep: Take black-cherry water, four ounces; treacle-water, one ounce; lemon-juice, ſix drachms; ſpirit of ſweet nitre and ſpiritus volatile oleoſum, of each fifteen drops: mix. Give a ſpoonful or two every third or fourth hour; and let the ulcers in the mouth be cleanſed with the following gargle: Take barley decoction, three ounces; beſt vinegar, one ounce; ſyrup of mulberries, ſix drachms: mix. This ſhould be uſed twice or thrice a day, with a ſoft linen rag, or the nurſe's finger.

Coughing, crying, violent motion, and tight ſwathing, are apt to cauſe *ruptures* in the tender bodies of infants. While the rupture is freſh, it may be remedied by the conſtant wearing of a truſs, made for that purpoſe. Aſtringent fomentations, made of pomegranate-peels, balauſtine, and red-roſe flowers, boiled in lime-water, and mixed with red wine, may be uſed after the inteſtines are replaced, which ſhould be immediately done. Small ruptures in the groin and privities, happening frequently in children, are uſually cured with ſmall difficulty, by only plaiſters and bandages; but, when they continue obſtinate, the child ſhould be kept in the cradle as quiet as poſſible.

When the *ſutures* or joining ſeams of the *head* continue too long open, it is thought a bad ſign. In this caſe it is uſual to rub the head often with a little warm rum or brandy, mixed with the white of an egg and palm-oil, a red cloth being conſtantly worn over the part. But, when this diſorder proceeds from a collection of water in the head, it muſt be cured by iſſues in the neck, perpetual bliſters, and purgatives. A purgative diet-drink may be made of rhubarb and ſweet-fennel ſeeds, to be drunk daily. When there is a diſorder directly oppoſite to this, called *head-mould ſhot,* which ſignifies a too cloſe locking of the ſutures, it is uſually left to nature, as admitting of no help from medicine.

*Breakings out* in children, when they are ſuperficial, contain a thin yellow matter, and leave the ſkin beneath red when the ſcabs fall off, are rather ſalutary than hurtful. It is cuſtomary, however, to purge with a few grains of rhubarb, and anoint the puſtules with cream, or oil of almonds, or extract of Saturn, commonly called Goulard. A little baſilicon, likewiſe, ſpread thin upon lint, has been found uſeful; and the body ſhould be kept open. But, when theſe caſes grow inveterate and ſtubborn, there can be no ſafer method than a courſe of Ethiop's mineral and rhubarb.

The rickets is a diſorder of the bones in children, cauſing a bunching out or crookedneſs thereof. It may be occaſioned by ſwathing a child too tight in ſome places, and too looſe in others; by placing it in an inconvenient, or too often in the ſame, poſture; ſuffering it to be long wet, not giving it proper motion, or uſing it to one arm only. It may alſo be owing to the parents, or ſome defect in the digeſtive faculty, or a viſcidity of the blood. But the moſt evident cauſe of the rickets, is the violence done to the body by preſſure of ſwathing, while the bones are but in a cartilaginous ſtate. Add to this, external injury by falls, blows, diſlocations, or fractures, which ſpecies ſometimes bring on an aſthma, conſumption, or crookedneſs of the back. Upon the firſt appearance of this diſeaſe, which uſually happens between the eighth month and the fifth year, the part it affects grows flaccid and weak; the child becomes pale, ſickly, ſlothful, and loſes the uſe of its feet, though it had it before; the head grows too large for the trunk, and cannot be managed by the muſcles of the neck; knotty excreſcences appear in the wriſts, ancles, and tops of the ribs; the bones of the legs and thighs become crooked, which makes the motion diſagreeable; and ſometimes the arms alſo are diſtorted, and appear knotty. If theſe ſymptoms continue long, a difficulty of breathing, cough, and hyſteric fever, come on; the belly ſwells, the pulſe grows weak, and the child's life is in danger. The rickets is moſt commonly cured, when taken in time, and while the child is very young. But, if it continues long, the patient generally become a dwarf, and is ſickly or phthiſical during life, eſpecially if the back be any way affected. A ricketty child ſhould be uſed to motion, and kept as much as poſſible in a poſture oppoſite to that which his bones are inclined to. It is alſo ſerviceable, before the diſtemper is confirmed, to plunge the child two or three times every morning in a tub of cold water, during the months of May and June eſpecially. After being taken out the laſt time, it is to be well dried, and put immediately into a bed or cradle, there to ſweat freely for an hour or more, as the ſtrength will bear; and, when it grows cool again, it may be taken up and ſhifted. The back-bone alſo, and joints, may every night be anointed before the fire, with the white of an egg, beat into a water with a whiſk or ſpoon; or with a liniment of rum and palm oil. It is uſual likewiſe to apply a plaiſter of minium and oxycroceum along his back, and to rub him all over before the fire, but moſtly the parts affected, with a dry linen cloth. But perhaps nothing can exceed the following liniment and plaiſter; the former for anointing the joints, and principal parts affected, with a warm hand, once or twice a-day; and the latter for applying to the back, or any particular part, being ſpread upon leather. Take nerve ointment, with oils of palms and bays, of each one ounce; balſam of Peru, and oil of nutmeg by expreſſion, of each two drachms; oil of cloves and chemical oil of amber, of each ten drops; compound ſpirit of lavender, one ounce; ſpirit of ſal ammoniac, two drachms: mix for a liniment. Take plaiſters of cummin, brown minium, and herniam and oxycroceum, of each half an ounce; balſam of Peru, one drachm; powder of red-roſe flowers, and armenian bole, of each half an ounce; oils of amber and camphire, of each one drachm; oil of parſley, enough to make a conſiſtence for a plaiſter. When the diſtemper ſeems fixed and obſtinate, iſſues may be cut in the arms and neck, eſpecially if the head be large, and the child of a groſs habit.

## OF BARRENNESS IN WOMEN AND INSUFFICIENCY IN MEN.

BARRENNESS is ſuch a ſtate of a woman's body as indiſpoſes it, upon the uſe of the natural means, to conceive and propagate her ſpecies. This diſtemper proceeds from many ſources, which may be reduced to theſe two general heads: Firſt,---An indiſpoſition of the parts to receive the male ſemen in the act of copulation, or that vital effluvium ſtreaming from it which alone can impregnate the ovaria. Secondly,---An inaptitude to retain and nouriſh the vital particle after it is injected, ſo as to make it grow and expand its parts, till it becomes a proper fœtus. The reception of the ſeed is hindered by many cauſes; as, immature age, when by reaſon of the narrowneſs of the genital paſſages the woman cannot admit the virile member, or at leaſt not without great pain, which makes her diſlike copulation; and old age hath ſometimes the ſame effect; for, in elderly virgins, the parts are ſo ſtraitened for want of uſe, that they cannot without difficulty contribute to the means of generation. Women who are lame alſo, or have their limbs diſtorted, or their hips depreſſed, cannot always lie in ſuch a poſture as is neceſſary for a fit reception of the ſemen. Too much fat likewiſe ſtops the paſſage, particularly when the omentum preſſes upon the orifice of the womb, and renders the copulation incommodious. And, when a woman is troubled with a cold intemperament of the womb, ſhe becomes dull and indifferent as to conjugal embraces, in which ſhe hardly enjoys any pleaſure, or is ſo ſlowly moved, that the inner orifice of the womb does not open ſeaſonably to receive the man's ſeed. The paſſions of the mind are alſo a great hindrance to fertility, eſpecially hatred between man and wife, whereby the woman, having an averſion to enjoyment, does not ſupply ſpirits ſufficient to make the genital parts turgid at the time of coition: nor can the womb then kindly meet the effluvium, and draw it into its cavity in a due manner. Swellings, ulcers, calloſities, obſtructions, diſtortions of the genital or neighbouring parts, may be ſo many impediments to the proper reception of the male ſemen, or its retention and nutriment after reception. A ſtone in the bladder may have the ſame effect, as may too great a moiſtneſs and ſlipperineſs of the womb or vagina, when they are filled with excrementitious humours, and rendered too lax. Conception is alſo hindered by a hectic, hydropic, or feveriſh, ſickly, habit; by a deficiency or obſtruction of the monthly courſes, when the natural briſkneſs of the blood is wanting, by an immoderate flux of the courſes, which impoveriſh the fluids; by the whites, which, continuing too long, relax the glands of the womb, and drown, as it were, the prolific particles; and too often by *ſecret venery*, which utterly deſtroys the tone and vigour of the parts. This may particularly happen on the ſide of the man, ſince it induces a ſeminal weakneſs, and a want of proper erection. A virulent gonorrhœa or ill-cured venereal caſe, faſt living, a worn-out conſtitution, and want of animal ſpirits, or ſufficient ſeed, are ſo many obſtacles to procreation. Sometimes indeed, there may be no defect diſcoverable on either ſide, and yet the parties remain without iſſue, notwithſtanding their moſt earneſt endeavours to the contrary. When a ſwelling actually appears in the uterine veſſels, when the menſes are irregular, or the whites have continued long, if, by the uſe of proper means, the woman does not conceive under theſe circumſtances, her own reaſon will dictate to her, that ſhe muſt have immediate recourſe to the remedies preſcribed for thoſe particular complaints. When ſhe is very fat and bulky, and has room to think her conception is thereby hindered, her only way is to correct that vicious habit by a thin ſpare diet, and proper evacuations. If the lips of the privities, or the entrance of the vagina, are cloſed, it is manifeſt to the ſight: but, when the orifice of the womb is ſhut up, it is difficult to be known, while the patient is very young, and till her courſes come down: but when the patient is once certain that it happens by any of theſe cauſes, it may not be raſh to ſay, that conception is impracticable till they are removed. When there is a total want of erection, or of ſeminal matter, on the ſide of the male, generation is not only impoſſible, but the cure very precarious and difficult. Preparatory to the cure of infertility in either ſex, it is proper to uſe evacuations, unleſs any particular ſymptom ſhew them to be dangerous. Bleeding, lenient purgatives, ſuch as the ſolutive electuary, and a gentle vomit of ipecacuanha, eſpecially if the perſon be plethoric, or cacochymic, cannot but be of great ſervice; becauſe moſt of the medicines to be preſcribed, in this caſe, being aromatic, or highly nouriſhing, may otherwiſe bring on inflammatory diſorders, as the pleuriſy, inflammation of the lungs, and the like. Due evacuations having been complied with, proceed with the following ſtrengthening electuary: take roots of ſatyrion and eringo candied, of each one ounce; powders of cinnamon, ſweet-fennel ſeeds, and preſerved ginger, of each half an ounce; mace, roots of contrayerva and Spaniſh angelica, of each one drachm; troches of vipers, one ounce; juice of kermes, ſix drachms; tincture of cantharides, half a drachm; ſyrup of cloves, a ſufficient quantity to make an electuary. Let the quantity of a large nutmeg be taken every morning early, at about five o'clock every afternoon, and at night going to bed; and let this courſe be continued as long as the caſe requires. Three ſpoonfuls of the following wine ſhould be drunk after each doſe, to the efficacy of which it will make a conſiderable addition. Take canary wine, two quarts; cloves, nutmegs, long pepper, ſmaller cardamum ſeeds, Virginia ſnake-root, and cochineal, of each one drachm and a half; ſyrup of citron peels, four ounces: infuſe the aromatics, and mix in the ſyrup. If theſe, upon trial, ſhould not be found effectual; the following, which is more ſtimulating and powerful, ſhould be taken, viz. Take conſerve of orange-peels, one ounce; Venice treacle, and confection of kermes, of each half an ounce; ſpecies of diambræ, winter's bark, powder of ſaffron, ſmaller cardamum ſeeds, carraways, powdered nutmegs, Virginian ſnake-root, and cloves, of each one drachm; viper's fleſh an ounce; balſamic ſyrup, enough to make an electuary. Let this be taken in the ſame quantities, and at the ſame intervals, as the other, drinking after it four ſpoonfuls of the following infuſion: Take cinnamon powdered, one ounce; ſweet-fennel ſeeds bruiſed, and lavender flowers, of each half an ounce; Spaniſh angelica root, ginger, contrayerva, mace, and cochineal, of each one drachm and a half; canary wine, two quarts: infuſe according to art for two or three days, and to the ſtrained infuſion add ſyrups of ſaffron and cloves, of each two ounces. At twelve o'clock each day, take a tableſpoon-full of the Solar Tincture in a wine-glaſs of cold ſpring water; this Tincture is a moſt excellent diſcovery for the purpoſe of curing ſterility. It rectifies and warms the blood and juices, increaſes the ſpirits, invigorates and revives the whole human machine, and not only raiſes the appetite to venereal embraces, but removes the uſual obſtructions of fertility; prepares the ſemen for performing its office, and the ova for impregnation. In old age it warms, comforts, and excites the generative parts to admiration, and ſeldom fails of performing a cure in forty or fifty days, if duly followed, and the barrenneſs or imbecility be not abſolutely incurable by medicine; particularly if aſſiſted with a nouriſhing diet, of which plenty of good potatoes and rich milk ought to make a conſiderable part. When there is a ſufficient erection, and only the ſeed is wanting, all ſtimulating and aromatic medicines muſt be entirely omitted, and the cure attempted with the Tincture only, aſſiſted with a nouriſhing diet; to which the uſe of external liniments muſt be added. Take nerve ointment, two ounces; oil of mace by expreſſion, one drachm and a half; balſam of Peru, two drachms; chymical oils of lavender, cloves, and rhodium, of each four drops: mix. Anoint the parts between whiles with this liniment; that is to ſay, the penis and ſcrotum if it be for a man, and the pudendum if for a woman, and it will not fail of adminiſtering comfort and ſtrength. If any thing yet more ſtimulating be deſired, a drachm and a half, or two drachms, of tincture of cantharides, may be added to either preparation. But I would not adviſe any debilitated perſon to be too buſy with high provocatives, becauſe they may excite to the uſe of venery before nature is prepared for it, and ſo exhauſt the animal ſpirits more by one ſingle act of coition than it would be by twenty in the common way. It is better, therefore, for moſt perſons, to keep to the liniments and Tincture only, that their ſtrength and ability may be always equal to their inclination. To recover the tone and vigour of the internal parts in women, uſe the following: Take cloves, nutmegs, ginger, Spaniſh angelica, of each one drachm; aloes wood, mace, cardamum ſeeds, of each one ſcruple; mint leaves, one handful; cantharides, two drachms; infuſe them in a pint of white white, and boil over a gentle fire till it is reduced to twelve ounces: then ſtrain it, and inject two ounces warm into the uterus every night going to bed, taking at the ſame time forty drops of the Lunar Tiincture in a wine-glaſs of cold water. When the parts abound with moiſture, reſtringent or aromatic fumigations may be uſed to advantage, as in the caſe of the whites, and of the falling down of the womb and fundament. The ingredients proper in the preſent caſe, are ſtorax, cloves, nutmegs, caſtor, ginger, Spaniſh angelica root, and galingals. Equal quantities of theſe may be taken powdered, and mixed together, and about an ounce of the mixture is ſufficient to burn at a time, according to the directions in the place above referred to. Where other things have failed, the cold bath hath been of ſervice to both ſexes, eſpecially in ſome phlegmatic conſtitutions; a journey to Bath alſo, or Tunbridge, and drinking the waters for ſome time, hath been attended with good ſucceſs.

Having before cautioned againſt the too frequent uſe of venery, eſpecially for thoſe who ſeem to be infertile through weakneſs, it will be proper juſt to hint the moſt auſpicious ſeaſons for performing the conjugal act to good purpoſe. It has been found, that, though a woman may conceive at any time during the three weeks that her courſes are entirely off, yet ſhe is more apt to do ſo immediately after their ceaſing, than at any other time between the periods of their return. This hint may be made uſe of by weakly people, where the man and the woman are both equally prudent and temperate. When the lips of the privities grow together, they are cautiouſly to be ſeparated by inciſion, and the ſides kept aſunder for ſome time by rags dipped in a proper ointment. And if the mouth of the womb ſhould happen to be cloſed, a proper peſſary of cork, caſed over with wax, may be introduced to keep it open. But, the aſſiſtance of a ſkilful ſurgeon being always neceſſary in theſe extraordinary caſes, I chooſe not to inſiſt on them any longer. I ſhall add only a few words, directed peculiarly to the men, who find themſelves incapable to propagate their ſpecies, though they have not any natural defect in the inſtruments of generation: for, as to abſolute impotency and incapacity of copulation, as it muſt be manifeſt to the ſight, either from the want of erection, or due proportion of the penis, or a deficiency of the teſticles, ſo it is what no man will pretend to cure; on which account the laws have given the wife a remedy, where there can be none for the huſband, by allowing her to ſue out a divorce, and marry another man. A ſimple gleet, brought on by ſelf-pollution, is one the greateſt cauſes of inſufficiency. It greatly debilitates the whole man, is attended with weakneſs and oftentimes pain in the back, heavineſs and pain in the teſticles, and without help uſually terminates in that kind of conſumption which is called a tabes dorſalis, or conſumption of the back. It is a conſtant oozing of a clear ſeminal matter, which diſtinguiſhes it from an impure venereal running. A man that is troubled with this ſhocking complaint, either from natural infirmity, or habitual vice, ſhould never attempt to propagate his ſpecies, till ſuch time as he is perfectly cured; for, beſides that his endeavours would be ineffectual, they would infallibly heighten his infirmity. The beſt medicines in the whole body of phyſic for this dangerous diſtemper, are thoſe juſt before mentioned; and the ſame directions ſhould be exactly followed by thoſe men whoſe ſeed is rendered too thin and watery, though without any ſuch laxation of the ſeminal veſſels as occaſions a ſimple gleet; and alſo by thoſe men, who through weakneſs of the parts, are apt to emit their ſeed as ſoon as they entertain any amorous thoughts, by which means they are not only hindered from copulation, but even from fruition itſelf. In both theſe caſes, as well as in a ſimple gleet, abſtinence from conjugal embraces, and perſevering the uſe of the Solar Tincture, with invigorating food, ſuch as jellies, broths, oyſters, and all agglutinating meats, are the moſt effectual means of obtaining a cure.

There is a certain occult and ſecret ſpecies of barrenneſs, that cannot be attributed to any of the cauſes before aſſigned, or indeed to any viſible cauſe at all. This happens when no manner of defect is diſcoverable, on the ſide either of the male or female, and yet they ſhall, againſt their inclinations, remain without iſſue. Many odd conjectures have been ſtarted on this account, concerning the poſſible cauſes of ſterility, when neither perſon appears to be in fault. Some ſuperſtitious people have imputed it to ſorcery, and recourſe has been had to incantations, amulets, charms, and magic rites, in order to the cure. But people of underſtanding give no heed to ſuch fables, being ſatisfied, that when both parties are of ſuitable years, briſk, and not labouring under any apparent weakneſs or indiſpoſition, if fertility do not follow their nuptial intercourſe, there muſt be ſome real and mechanical reaſon for it, though not apparent to the ſenſes. When there appears no deficiency or defect in either the man or woman, and none of the before-mentioned cauſes of barrenneſs exiſt, we muſt then recur to the real phyſical cauſe, which is conſidered and underſtood by very few. It is what is called the *temperament*, *conſtitution*, or *complexion*; if the man be of a hot temperament, the woman ſhould be of a cold one; if he be of the dry temperament, ſhe ſhould be of the moiſt: but if both be of a dry or both of a moiſt conſtitution, they cannot propagote, though neither can be barren, ſingly conſidered, and, if joined with an apt conſtitution, might both become fruitful. It muſt fall under every one's obſervation, that both women and men, who marry more than once, will have children by one marriage, and not by another; which will certainly confirm what is above aſſerted. And again, there are other cauſes in nature, much more abſtruſe and occult than the foregoing, whereby men and women prove barren, though, to all external appearances, their conformation is every way congenial to procreation. The cauſe, foſtered in the mother's womb, and having its root in the conſtruction of the zodical ſigns and planetary influence under which the embryo is conceived and nouriſhed, is totally incurable. So likewiſe the variety of parts, both male and female, have their cauſe in the conſtruction of the heavenly bodies, which predominate and govern their conception and birth; for it is certainly found, that, if the Sun be configured with the Moon, in the degrees of Mercury, and Mars and Venus irradiate the ſame, in maſculine ſigns, the man born under ſuch influence will exceed in that which is natural, having thoſe parts in exceſs which are proper to men; but the women ſo born will have a conformation of parts preternatural and mixed; but, if Mars and Venus be conſtituted after a maſculine manner in feminine ſigns, the men will be ſubject to a mixture of ſex, and the women to exceſs of parts and violent luſt. All theſe ſpeculations, wonderful as they are, and a thouſand others, whoſe effects, though unſeen, are moſt ſenſibly felt, are fully explained in my Illuſtration and Diſplay of the Occult Sciences; where it is plainly ſhewn, that, the more we enquire into the pathleſs ways of nature, the more readily we deduce a radical cauſe for all her operations.

## OF SYMPATHY AND ANTIPATHY.

TO underſtand the properties of ſympathy and antipathy, is, in fact, to take into our comprehenſion the univerſal ſyſtem of nature, with her obvious and occult properties, and the gradations and conſent of parts of all its atoms. This ſtudy becomes all men; but more eſpecially thoſe who practiſe phyſic, ſince their effects not unfrequently preſerve life, or deſtroy it; and, in the beginning, middle, and end, of diſeaſes, the reſult may be always known. Sympathy and antipathy are found in all things; and, if traced, account for thoſe wonderful occurrences in nature, which otherwiſe appear altogether inexplicable. All vegetable and mineral productions have not only a wonderful ſympathetic power with their own ſpecies, but ſo likewiſe has all animated nature; and more particularly man. It is certainly true that this celeſtial inviſible principle is born with us, and emanates from the centre of the intellectual ſoul, combined with the terreſtrial body; and, paſſing through its nerves, forms an atmoſphere around us, whereby the ſenſations of ſympapathy and antipathy, of love and hatred, of joy and grief, and all the propenſities of human nature, are by a colliſion of rays, which reciprocally cohere or repel whatever comes in contact with them, that the effect is made manifeſt to our ſenſes. Hence it is, that ſavoury high-ſeaſoned meats, ſeen or ſmelt, excite the appetite and affect the glands and parts of the mouth; that an impudent or ſhameful thing, ſeen or heard, affects the cheeks with bluſhes; and ſo, on the contrary, if a thing pleaſe, it affects the præcordia, and excites the muſcles of the face and mouth to laughter; if it grieve, it affects the glands of the eyes, ſo as to occaſion tears, and irritates the muſcles of the face into an aſpect of crying; ſo kiſſing, though the delirium or pleaſure is excited by the lips, yet the moſt ſenſible irritation falls upon the genital parts, which are rendered turgid, ſtiff, and apt for procreation, as the ſum and centre, or full end or completion, of all ſublunary enjoyments. And hence the cauſe of thoſe indeſcribable paſſions, love, luſt, inclination, ſympathetic affection, &c. for if we ſee a limb amputated, or a violent blow ſtruck, we cannot help feeling a ſympathetic pain in the ſelf-ſame member of our own bodies; which is the reaſon why thoſe perſons can never make good ſurgeons, whoſe conception and birth were irradiated by the ſtrong ſympathetic rays of benefic ſtars, or, as it is commonly termed, inherit ſtrong ſympathizing paſſions. So again, if either man or woman look upon brutes in the act of copulation, it ſympathetically affects the ſame organs in themſelves, and excites to laſciviouſneſs and luſt.

Some perſons, we find, are ſo delicately organized, as to become violently enamoured with an object at firſt ſight, without either having exchanged a ſingle word; and it often happens that there is no alternative but death or the immediate enjoyment of the beloved perſon! This is produced by a ſympathy of ſouls, united by a combination of ſelf-reflected rays, which reciprocally cohere from the male to the female, and from the female to the male, by the action of the intellectual ſoul on the ſolids and fluids of the body; and, as this combination or colliſion of rays is formed according to the different principles from whence it acts, and the organs of ſenſe on which it ſtrikes, ſo it excites a ſweet vibratory delirium in the brain, which conſtitutes that ardent affection and longing deſire for the perſon, whoſe genial effluvium had thus drawn forth or excited the paſſion of love. And, it is by this alone, we can account for thoſe perfections of beauty and merit diſcoverable by one man's ſenſes, to which another will continue for ever inſenſible and blind.

It is from a ſimilar cauſe that we define the longing of a pregnant woman, and its effect upon the fœtus; for, as like produces its like, and the child takes its frame from the external members of its parents in the act of coition, ſo there is a ſympathy and concordancy betwixt the child's members and thoſe of its mother; therefore, whatever member the mother touches at the time her ſoul is drawn forth in longing after ſome elementary ſubſtance, the ſame member of the child receives the impreſſion, and an external mark is produced, according to the nature and quality of the thing longed for. But, this impreſſion can only take place before the embryo has quickened; for, till then, the child is paſſive, and the generative eſſence of the mother active, whence follows a conſent of parts; but, when the light of life is kindled in the fœtus, it lives in its own ſpirit, and is no longer ſubject to this affection, nor ſo liable to abortion.

We might here adduce ten thouſand curious inſtances of the effects of ſympathy and antipathy, as well from natural hiſtory as from the Occult Sciences; but, as this would be foreign to my purpoſe, and too much enlarge the preſent publication, I have given a very full diſcuſſion of this ſubject in a work I have lately publiſhed, intituled, "A Key to Phyſic and the Occult Sciences;" in which I have laid down ſuch rules as to prevent a poſſibility of miſtaking the patient's caſe, or of failing of a cure, if the lamp of life be not too far exhauſted; and have alſo more particularly elucidated the aſtrologic ſcience, in order to throw new lights on ſome intereſting parts of my former publications; and alſo to illuſtrate the ſcience of Animal Magnetiſm, which is wholly founded on the principles of ſympathy and antipathy.

# CULPEPER's DISPENSATORY, FOR FAMILY USE;

CONTAINING

A choice SELECTION of invaluable PRESCRIPTIONS for almoſt all DISEASES incident to the HUMAN BODY.

## AROMATIC OR SPICE WATER.

*TAKE of white canella, half a pound; freſh outward peel of lemons, four ounces; leſſer cardamum ſeeds, two ounces; French brandy, two gallons. Let them ſteep together for four days; and then diſtil off two gallons.*

This is a warm ſerviceable cordial; for, it gratefully invigorates the animal ſpirits, ſtimulates the nerves, and thus diſſolves cold viſcid humours, and expels flatulencies. It is an excellent ſtomachic, helps digeſtion, and ſtops vomiting; and as a carminative is uſed in the rougher cathartics. Half a wine-glaſs of it is a doſe in windy and painful complaints of the ſtomach and bowels, and to be repeated occaſionally.

## PLAGUE AND FEVER WATER.

*Take roots of maſter-wort, a pound and a half; angelica ſeeds, half a pound; elder-flowers, leaves of ſcordium, of each four ounces; French brandy, three gallons. Steep them together for the ſpace of four days; and then draw off, by diſtillation, two gallons and a half.*

The ingredients are well choſen for the purpoſes intended; it being deſigned as a high cordial in very low and languid caſes, and to raiſe the ſpirits in the plague and malignant fevers with depreſſions. If a fifth part of diſtilled vinegar be added, it is then termed *aqua epidemia acida*, which is a very powerful ſudorific, and reſiſter of putrefaction in all peſtilential and other putrid fevers.

## EYE-WATER.

*Take white vitriol, half a pound; water, four pints. Boil them until the vitriol is diſſolved, and then filter the liquor for uſe.*

This is calculated to cool and repel thoſe ſharp rheums and inflammations which ſometimes fall upon the eyes, where the veſſels, being weak and thin, are often unable to reſiſt duly the impulſe of the blood, unleſs they are conſtringed and ſtrengthened by ſome ſuch collyrium. It is likewiſe good to clear them of beginning films and ſpecks. If it ſhould prove too ſharp for tender eyes, it may be diluted with a little ſpring or roſe water.

## ANODYNE BALSAM.

*Take of ſaponaceous balſam, or opodeldoc, a pound and a half; of liquid laudanum, half a pound. Mix them for uſe.*

This is certainly an extremely penetrating and reſolvent anodyne, both for internal and external uſe; being a moſt excellent medicine for procuring eaſe in the extremities of pain, and in nervous and nephritic cholics. It cleanſes all the viſcera and glandular parts; therefore good in the jaundice and ſuch diſtempers of the urinary paſſages as proceed from the obſtruction of gravel or ſlimy humours. Inwardly it may be given from 20 to 40 drops. And outwardly, applied to the pained part, does mighty ſervice, a rag being dipped in it, and retained thereon.

## ALEXETERIAL BOLUS.

*Take of Virginian ſnake-root, fifteen grains; of caſtor, ten grains; of camphor, three grains; ſyrup of ſugar, enough to mix and make them into a bolus.*

This is a powerful alexipharmic, and is given in moſt kinds of fevers, eſpecially the worſt and more malignant ſort, attended with convulſions and deliria. It is hardly ever omitted, when the pulſe and ſpirits begin to flag in the progreſs of a putrid fever, ſmall-pox, meaſles, miliary fever, &c. It is good in nervous and paralytic caſes, which proceed from too much humidity; as alſo in the febricula, whether hyſterical or hypochondriacal. If plentifully preſcribed, it requires to be well diluted with ſmall liquors; and, thus managed, it ſeldom fails of raiſing a diaphoræſis, and bringing the diſtemper to a criſis.

## DIAPHORETIC BOLUS.

*Take of compound powder of contrayerva, and of crude ſalt of ammoniac, each one ſcruple; ſyrup of ſugar as much as is ſufficient to make a bolus.*

This penetrates into the moſt intimate parts, and is a noble aperient, ſudorific, antiſeptic, and diuretic. Hence it becomes proper, in caſes where perſpiration is to be augmented; and in fevers, in which the diſorder is to be eliminated by the cuticular diſcharges. It is preſcribed, with a draught of the plague-water, to remove cachectic and anaſarcous ſwellings.

## BOLUS OF JALAP WITH MERCURY.

*Take of choice jalap, one ſcruple; calomel, from five to ten grains; ſyrup of ſugar, a ſufficient quantity. Mix them together into a bolus.*

This is a proper bolus in moſt caſes where a briſk purgative, preceded by a clyſter, is neceſſary, either to make a revulſion after bleeding in inflammatory ſwellings and obſtructions of the parts contained in the head, neck, or thorax; or to make an evacuation of the inteſtines and adjacent viſcera of the abdomen. Thus may a bilious fever be carried off, when it has lingered, and there is little probability of its ending critically by any other way: as a diaphoretic and hydrogogue, it is of uſe in dropſies, defluxions of the head, eyes, and ears; as alſo in humoral coughs, and many obſtinate chronical diſtempers. It deſtroys worms, cures a violent gonorrhœa and fluor albus. It is alſo good to cleanſe the bowels from their redundant viſcid mucus, that often clogs or ſhuts up the chylopoietic ſyſtem, ſo as to hinder the entrance and proper effects of other medicines. In intermitting fevers it is a ſpecific.

### A PECTORAL BOLUS.

*Take of ſpermaceti, fifteen grains; of gum ammoniacum, ten grains; of the volatile ſalt of hartſhorn, ſeven grains. Mix, and make them into a bolus.*

This is an excellent balſamic in many diſtempers of the breaſt; and gently deterges and heals. In coughs, pleuriſies, and inward impoſthumations, where the *mucus* of the bowels has been abraded by acrimony and choler; as alſo in diarrhœas and dyſenteries; this is a very good healer. In ulcerations of the kidneys and bloody urine, it is likewiſe a very ſuitable medicine; and, by ſoftening and relaxing the fibres; it contributes frequently to the expulſion of gravel. It may be taken once or twice a-day, with ſome proper emulſion, draught, or julep, according to the indications.

### THE RHUBARB BOLUS WITH CALOMEL.

*Take of the beſt purgative rhubarb, twenty-five grains; of calomel, five grains. Mix, and make them into a bolus, with as much ſyrup of ſugar as will ſuffice.*

This is an admirable medicine in moſt caſes where purging is neceſſary, to cleanſe the firſt paſſages of any thing that hinders the ſucceſsful operation of other alterative medicines. See the virtues of the jalap bolus, which this nearly anſwers, but is more aſtringent, hepatic, ſtomachic, and a purger of the urine and ſabulous concretions.

### EMOLLIENT CATAPLASM.

*Take of the crumb of bread, eight ounces; white ſoap, one ounce; freſh cow's-milk, a ſufficient quantity. Boil them a little, and ſpread for uſe.*

This is anodyne, penetrating, and reſolvent, therefore applied to the ſoles of the feet in fevers, to the joints when afflicted with the gout, and cauſes ſometimes the exudation of a great quantity of ſerous matter; and to white ſwellings.

### SUPPURATING CATAPLASM.

*This is made by adding to the foregoing cataplaſm, of raw onions bruiſed, one ounce and a half; baſilicon ointment, one ounce.*

This is good to draw and ſuppurate all kinds of tumours; and to ripen, break, and cleanſe, impoſthumations.

### APERIENT ALE.

*Take of old muſtard-ſeed, ten ounces; long birthwort-root, ſix ounces; tops of leſſer centaury, two ounces; ſavin, one ounce; new ſmall ale, ten gallons.*

This cleanſes the womb, excites the menſtrual diſcharges, and forwards delivery. It is ſerviceable in hyſterical diſorders, and good to looſen and diſcuſs viſcidities; and, therefore, excellent in all paralytic caſes, and the decays and defluxions attending old age.

### CEPHALIC ALE.

*Take of wild valerian-root, ten ounces; whole muſtard-ſeed, ſix ounces; Virginian ſnake-root, two ounces; roſemary, or ſage, three ounces; new ſmall ale, ten gallons.*

This is good againſt epilepſies, apoplexies, palſies, and all diſeaſes of that kind, and vertigoes from uterine obſtructions; it is alſo of uſe in almoſt all nervous complaints; eſpecially ſuch as ariſe from too great moiſture and cold.

### STRENGTHENING CONFECTION.

*Take of bole-ammoniac prepared, three ounces; tormentil roots, nutmegs, olibanum, of each two ounces; opium, one drachm and a half; ſyrup of dry roſes, thrice the weight of the powders. Mix them according to art.*

This alexipharmic, anodyne, and aſtringent vulnerary, is recommended in immoderate evacuations of the abdomen. A drachm or two of it, at a doſe, along with the chalk julep, will give an effectual check to the diſorder. It is ſucceſsfully preſcribed for dirrhœas in the meaſles, ſmall-pox, or fevers; as alſo for relaxations, hæmorrhages, and hurts in the time of pregnancy; and likewiſe for the *fluor albus*, and ſeminal weakneſs.

### ANTIHECTIC DECOCTION.

*Take of the roots of comfry, eryngo, each half an ounce; conſerve of roſes, two ounces; water, three pints. Boil theſe ingredients together, till there remains a quart of liquor after ſtraining; to which add of ſweet ſpirit of vitriol, forty drops.*

This is grateful and ſtrengthening; it reſtrains the ſaline particles of the blood, and hinders it from ruſhing too impetuouſly through the lungs; therefore it takes place in newly-begun conſumptions, hectic fevers, night ſweats, &c. where the colliquation of the humours cauſes a waſting of the muſcular parts.

## COMMON DECOCTION.

*Take of mallow leaves, camomile flowers, each one ounce; water, two quarts. Boil till one quart of the liquor is waſted: then ſtrain out the remaining decoction for uſe.*

This is emollient and carminative, therefore accounted a good anodyne, and excellent againſt gripes, nephritic pains, ſtranguaries, and heat of urine; as alſo for cramps, and ſuch-like ſpaſms. It is likewiſe uſed for lotions and clyſters.

## The DIURETIC DECOCTION.

*Take of the roots of parſley, or thoſe of fennel, one ounce; ſeeds of wild carrot, three drachms; pellitory of the wall, half an ounce; raiſins of the ſun, two ounces; water, three pints. Boil them together, till there remains a quart of liquor after ſtraining; to which add of nitre, one drachm.*

This abſterges much ſlime and viſcid adheſions from the ſtomach and bowels; cleanſes the viſcera, particularly the kidneys; keeps the juices cool and fluid; and greatly aſſiſts their diſcharge by urine, eſpecially in uterine and hyſteric caſes.

## VULNERARY DECOCTION.

*Take of the herb ground-ivy, leaves of plantain, each half an ounce; water, three pints. Boil them till there remains a quart of liquor after ſtraining; to which add, of white ſugar, half an ounce.*

This is cooling, abſterſive, and vulnerary; and preſcribed as an aſtringent in diſtempers of the lungs, chiefly for ſuch conſumptions as proceed from ſharp thin humours, weakneſſes, and ſpitting of blood.

## ANTIDYSENTERIC ELECTUARY.

*Take of the ſtrengthening confection, one ounce; balſam of Lucatellus, (diſſolved in the yolk of an egg,) half an ounce. Mix them together.*

This is an excellent internal vulnerary in an obſtinate bloody flux, to prevent abortion, &c. and very aptly formed for correſponding with ſuch purpoſes. The confection has its ſhare in accompliſhing a cure, partly from its aſtringency, partly from its opiate quality, by rendering the veſſels inſenſible of the pungency of the morbific particles; while the virtues of the balſam agglutinate, heal, and ſtop up, the mouths of the veſſels, and ſheath the acrimonious humours which abrade the parts.

## BALSAMIC ELECTUARY.

*Take of conſerve of roſes, two ounces; balſam of Lucatellus, (diſſolved in the yolk of an egg,) one ounce. Mix, and make them into an electuary.*

This is a noble medicine, eaſy to take, and ought to be repeated on the urgency of ſuch coughs as give ſuſpicion of tubercles, ulcerations, and decays of the lungs. It diſſolves tough phlegm in the bronchia, cures catarrhs and coughs from tickling defluxions; it repairs and heals inward exulcerations and bloody diſcharges, eſpecially of the kidneys, bladder, and uterus. In ſeminal weakneſſes, old gleets in both ſexes, there can be nothing better contrived. The quantity of a nutmeg may be taken two or three times in a day, with a draught of the antihectic decoction.

## CEPHALIC ELECTUARY.

*Take of wild valerian-root, miſletoe of the oak, each one ounce; ſyrup of ſugar, a ſufficient quantity. Mix them into an electuary.*

This is calculated for diſorders of the head, and is in great eſteem for epilepſies and inveterate head-achs. It is frequently preſcribed in apoplexies, vertigoes, and convulſions from uterine obſtructions.

## ELECTUARY AGAINST THE PILES.

*Take of lenitive electuary, two ounces; ſulphur vivum, half an ounce. Make thereof an electuary.*

The quantity of a nutmeg is to be taken of this every morning and night; it will keep the belly moderately lax, and greatly eaſe the piles.

## LENITIVE ELECTUARY.

*Take three ounces of polypody-roots, and three quarts of water. Boil till two quarts are waſted; adding, towards the end of the coction, two ounces of ſena, and half an ounce of coriander ſeeds. Strain out the liquor, add to it four pounds of white ſugar, and boil to the conſiſtence of a thick ſyrup; with which mix a pound of the pulp of French prunes; half a pound of the pulp of caſſia, and the ſame quantity of tamarinds. Make the whole into an electuary.*

This cools and purges very gently, and is convenient enough to add in clyſters. Internally it is more proper to prevent coſtiveneſs than to be exhibited as a regular cathartic. It is alſo intended to cleanſe the liver and other viſcera.

## STRENGTHENING ELECTUARY OF BARK.

*Take of Peruvian bark, one ounce and a half; colcothar of vitriol, three drachms; ſyrup of ſugar, a ſufficient quantity. Make them into an electuary.*

In robuſt conſtitutions this is preſcribed for ſtubborn agues; and alſo for fluxes and hæmorrages. It promotes diſcharges by urine, deſtroys worms, brings them away, and ſtrengthens the fibres; but in thin hectical habits it is not ſo proper. The colcothar here prevents the bark from going off by ſtool, which it is ſometimes apt to do; and opium likewiſe will have the ſame effect.

## ELECTUARY AGAINST FLUXES.

*Take of the ſtrengthening confection, two ounces; extract of logwood, one ounce; ſyrup of dry roſes, a ſufficient quantity. Make them into an electuary.*

This is an aſtringent, and good to fortify the ſtomach and bowels when weakened by a diarrhœa; and is much eſteemed of late for its virtues in curing a dyſentery.

### WARM PLAISTER.

*Take of gum-plaiſter, one ounce; bliſtering-plaiſter, two drachms. Melt them together over a gentle fire.*

The chief intention of this is to raiſe bliſters, and to create a ſtimulus in a languor or ſtupor of the nervous ſyſtem; to diſſolve a viſcoſity or ſizineſs of the juices, and hinder their tendency to a coagulation; or to cauſe a derivation and diſcharge of ſome morbific humour, and prevent its returning into the blood; therefore it is eſteemed uſeful in ſome inflammatory fevers, dropſies, and certain ſtages of the chryſtalline or watery ſmall-pox; eſpecially if the puſtules ſubſide, and the extremely viſcid matter of the diſeaſe can neither be brought to ſuppurate, nor be carried off by diuretics. It remarkably affects the kidneys and bladder, and provokes urine, not by an eaſy natural ejectment, but rather by an erytiſmus from its acrid ſalts that cauſe a ſtranguary, which ſhould be guarded againſt by broths and emulſions. It is good againſt a mortification, and reckoned an efficacious cleanſer and ſcourer of the urinary paſſages and uterus, when obſtructed with ſlough and viſcidities. But its uſe requires the higheſt caution and prudence; hence it is not every one who muſt think himſelf qualified to meddle, without diſtinction, with remedies, which are ſure to do good or hurt, according as they are adminiſtered.

### COMMON PLAISTER.

*Take of litharge prepared, three pounds; oil of olives, ſix pounds. Boil them up to a due conſiſtence.*

This is to ſupply the place of the diachylon plaiſter of former diſpenſatories; and is eſteemed more emollient, muturant, and reſolvent. It will alſo incarnate and cicatrize.

### DEFENSIVE PLAISTER.

*Take of litharge prepared, two pounds; oil of olives, four pounds. Boil them almoſt to the conſiſtence of a plaiſter, in which qualify ſix ounces of yellow wax, and four ounces of olibanum. Then add ſix ounces of bole ammoniac prepared, two ounces of dragon's blood in powder, and four ounces of Venice turpentine.*

This is employed to conſolidate fractures, to ſtrengthen luxations and weakneſſes of the loins and joints; and is alſo ſerviceable for ruptures and chilblains.

### BLISTERING PLAISTER.

*Take of Burgundy pitch, twenty ounces; Venice turpentine, cantharides in powder, each ſix ounces.*

This is a powerful epiſpaſtic, and is applied either to the head, between the ſhoulders, or to the ſoles of the feet. See its uſe in the warm plaiſter. But when applications are made to the feet, with an intent to ſtimulate ſtrongly, excite pain therein, and relieve the head, cataplaſms compoſed of equal parts of ſcraped horſe-radiſh, and powdered muſtard-ſeed, moiſtened with old-yeaſt, will anſwer the deſign expeditiouſly, ſtrongly, and effectually.

### MERCURIAL PLAISTER.

*Gum plaiſter is ſubſtituted here for diachylon.*

This admirably warms, ſoftens, and diſcuſſes, all indurations and hardened tumours, be they chalky, ſcrophulous, or venereal.

### STOMACH PLAISTER.

*Take of yellow wax, eight ounces; tacamahaca in powder, palm oil, each four ounces. Melt them together, and add of cloves in powder, two ounces; expreſſed oil of mace, one ounce and a half. Mix, and make them into a plaiſter, which is to be moiſtened, when freſh ſpread, with ſome drops of diſtilled oil of mint.*

This is intended as a warm, carminative, and cordial, application to the ſtomach, and exerts very conſiderable effects when ſuch things are wanted; therefore it is uſeful in flatulencies, gripes, and all complaints ariſing from indigeſtions; and a cold weak ſtomach cannot well fail finding relief from its uſe.

### COMMON EMULSION.

*Take of ſweet almonds, one ounce; water, one quart. Make them into an emulſion; to which add of white ſugar, two drachms. If three drachms of gum arabic be previouſly boiled in the water, the preparation is called*

### ARABIC EMULSION.

Either of theſe is ſingularly uſeful in many emergencies, particularly in acute diſtempers, and the gravel. In heat of urine and ſtranguaries, either from acrimonious humours or the ſalts of epiſpaſtics, they give immediate eaſe; and ought to be drunk while freſh, half a pint at a time, and pretty often. There are other ſorts of emulſions, which are calculated for diuretics, coolers, and pectorals.

### ANODYNE CLYSTER.

*Take of the infuſion of linſeed, ſix ounces; liquid laudanum, forty drops. Mix them together.*

This is excellent to aſſuage pains in lyenteries, and inflammations of the uterus and bladder, by reaſon of a proximity and conſent of parts.

### ANTICHOLIC CLYSTER.

*Take of the common decoction, half a pint; tinctura ſacra, one ounce; common ſalt, one drachm; linſeed oil, two ounces. Mix them together.*

This falls in with the view of unloading the bowels of their coſtive contents, and conſequently procures an immediate relief on many occaſions, chiefly in flatulencies, gripes, and bilious cholics. The addition of the ſalt, by a mild gentle ſtimulus, inſures its effects. It likewiſe deſtroys worms, particularly the aſcarides, if aſſiſted with a few grains of calomel by the mouth.

### THE PURGING CLYSTER.

*Take of the common decoction, half a pint; white ſoap, one ounce; ſyrup of buckthorn, an ounce and a half. Mix them according to art.*

This is penetrating, deterſive, and capable of diſſolving indurations and grumous viſcidities of the inteſtinal tube, eſpecially in the jaundice, and by ridding the bowels of their concreted contents may prevent an inflammation. It is uſeful in diſorders of the head, and may cauſe a revulſion in the fæculent vomitings.

### EXPRESSION OF MILLEPEDES.

*Take of live millepedes, (commonly called wood-lice,) three ounces; ſimple fennel-water, one pint; compound horſe-radiſh water, half a pint. Bruiſe the millepedes, gradually adding to them the diſtilled waters; and afterwards preſs out the liquor.*

This is an excellent diuretic, ſweetener and cleanſer of the blood, and a moſt efficacious medicine in all chronic caſes that are to be relieved by promoting the urinary diſcharges, as are many inveterate ulcers, ſtrumas, and ſcrophulous diſorders, and ſuch as frequently are the forerunners of ſcorbutic dropſies, from a retention of ſuch humours as obſtruct the viſcera, and fill the whole habit with water and viſcidities. Hence it is of ſingular efficacy in the ſtone, jaundice, nephritic pains, dyſury, cholic, and aſthma.

### AROMATIC FOMENTATION.

*Take of cloves, mace, each one drachm; red wine, one pint. Boil them a little, and then ſtrain out the liquor.*

This, applied warm to the abdomen, will be found of admirable ſervice in cholics, and for relaxed weak ſtomachs that are ſubject to diſtenſion from flatulency. It may be uſed to the head with ſucceſs in any diſorders from too much moiſture and pituitous defluxions.

### STRENGTHENING FOMENTATION.

*Take of oak-bark, one ounce; pomegranate-peel, half an ounce; forge-water, three pints. Boil them till there remains a quart of the ſtrained liquor; to which add of roch alum, two drachms.*

This is proper for hæmorrhages, whether uterine, hæmorrhoidal, or from any other part. It is alſo good to foment ſprains, fractures, or paralytic limbs; and will help to check immoderate vomitings.

### THE COMMON GARGLE.

*Take of water, ſix ounces; nitre, one drachm; honey of roſes, one ounce. Mix them together. To this gargariſm are ſometimes added, of ſweet ſpirit of vitriol, fifteen drops.*

This is proper to cleanſe and ſcour the mouth and throat from ſlough, and the phlegmatic matter which ſtuffs and tumifies the glands. It is alſo good to cool and deterge the mouth when ſore, parched, and dry, with a fever.

### EMOLLIENT GARGLE.

*Take of marſh-mallow roots, two ounces; figs, in number, four; water, three pints. Boil till there remains one quart of liquor, which ſtrain out for uſe.*

This is excellent to aſſuage pain and inflammation in the throat or mouth, to maturate any ulcer therein, and to mollify the bliſtered tongue and fauces in a ſalivation. The learned and accurate Sir John Pringle obſerves, that in the inflammatory quinſey, or ſtrangulation of the fauces, little benefit ariſes from the common gargles; that ſuch as are of an acid nature do more harm than good, by contracting the emunctories of the ſaliva and mucus, and thickening thoſe humours; that a decoction of figs in milk and water has a contrary effect, eſpecially if ſome ſal-ammoniac be added; by which the ſaliva is made thinner, and the glands brought to ſecrete more freely; a circumſtance always conducive to the cure.

### SALINE DRAUGHT.

*Take ſalt of wormwood, one ſcruple; lemon-juice, half an ounce; white ſugar, one drachm. Mix them together.*

This is an effectual remedy to ſtop vomitings, and is of ſingular uſe in fevers, eſpecially thoſe of the intermittent kind, when the bark often fails. It cauſes gentle breathing ſweats, and may be repeated every five or ſix hours occaſionally.

### ANTISCORBUTIC INFUSION.

*Take of water-trefoil, two ounces; oranges, half an ounce; boiling water, two quarts. Let them ſtand in infuſion for a night in a cloſe veſſel; afterwards ſtrain the liquor, and then add to it of compound horſe-radiſh water, half a pint.*

This is effectual againſt ſcrophulas, the king's evil, and all obſtinate ſcorbutic diſeaſes. In the rheumatic, dropſical, and cachectic, habits, it will be of good ſervice. It likewiſe gives due warmth to the nerves, which in paralytic caſes they are deſtitute of. It may be drunk at diſcretion, and the uſe of it continued according to the exigency of the diſorder.

### INFUSION OF LINSEED.

*Take of linſeed, two ſpoonfuls; liquorice-root, ſliced, half an ounce; boiling water, three pints. Let them ſtand to infuſe by the fire for ſome hours, and then ſtrain off the liquor.*

If an ounce of the leaves of colt's-foot be added to theſe ingredients, it will then be the pectoral infuſion. Both theſe are emollient mucilaginous liquors, and may be taken with advantage as ordinary drink in difficulty of making water; and in coughs and other complaints of the breaſt.

### BALSAMIC INJECTION.

*Take of balſam copaiba, half an ounce, and the yolk of one egg. Work them well together, and gradually add of lime-water, ſix ounces; honey of roſes, two ounces. Mix the whole well together.*

This is excellent for the conſolidation of wounds, and to cleanſe and heal ulcerations, gleets, and ſeminal weakneſſes, if uſed two or three times a-day; and for corroborating the nervous parts, which have been relaxed by the diſeaſe.

### THE MERCURIAL INJECTION.

*Take of quickſilver, balſam copaiba, each half an ounce. Beat and work them together, till the quickſilver is extinguiſhed; then put to the maſs the yolk of one egg. Mix the whole very well together, gradually adding of roſe-water, half a pint.*

This is calculated for gonorrhœas, and venereal ulcers in the urethra, vagina, and uterus; the quickſilver deſtroys the virulency, while the balſam heals and ſheaths the excoriated parts from the acrimony of the urine.

### THE CORDIAL JULEP.

*Take of alexterial water, four ounces; aromatic water, two ounces; ſaline aromatic ſpirit, tincture of ſaffron, each two drachms; white ſugar, half an ounce. Mix, and make them into a julep.*

This is a high cordial, and will bring on an effectual moiſture; conſequently remove all wearineſs, heat, and tenſion, of the parts; therefore it is of great ſervice in the depreſſed ſtate of fevers, fatigue from exceſſes, and lowneſs of ſpirits. A few ſpoonfuls, drunk every three or four hours, will, by its enlivening quality, communicate an agreeable ſenſation. It is likewiſe very aptly preſcribed with powders and boluſes.

### DIAPHORETIC JULEP.

*Take of alexterial water, four ounces; ſpirit of mindererus, two ounces; volatile ſalt of hartſhorn, ten grains; ſyrup of meconium, one ounce. Mix them together.*

In ſlow malignant fevers, with cold clammy ſweats, pale viſage, a low intermitting pulſe, and where great reſtleſſneſs prevails, this julep will be ſingularly beneficial. A tea-cup full may be given and repeated every four or five hours, till ſome criſis appears, and the diſtemper abates.

### DIURETIC JULEP.

*Take of ſpirit of mindererus, four ounces; compound horſe-radiſh water, two ounces; ſyrup of marſh-mallows, three ounces. Mix, and make a julep; to which may be added occaſionally, of ſpirit of amber, one drachm.*

This is ſtrongly diuretic; hence a good remedy againſt a ſuppreſſion of urine from any cauſe, the gravel, and nephritic pains. It will alſo promote and aſſiſt an urinary criſis; and may be repeated as the urgency of the ſymptoms indicates.

### THE FETID JULEP.

*Take of rue water, ſix ounces; aſſa-fœtida, one drachm and an half. Diſſolve the aſſa-fœtida in the water, and add to the ſolution, of antihyſteric water, two ounces; diſtilled oil of hartſhorn, twenty drops, received upon ten drachms of white ſugar. Mix the whole well together.*

This is ordered in hyſteric affections, and a defective ſtate of the menſes, and ſometimes in hypochondriacal caſes. A tea-cup full may be taken three or four times a-day.

### THE SALINE JULEP.

*Take of mint-water, ſyrup of lemons, each two ounces; ſalt of wormwood, one drachm. Make them into a julep.*

This is an admirable remedy in vomitings and hiccups. It has a mild and innocent virtue, though powerfully attenuating and reſolving, diuretic and ſudorific; hence it is excellent in rheumatiſms, fevers, and all diſorders from a ſizineſs of the blood. Two or three ſpoonfuls are given every five or ſix hours.

### THE ANODYNE LINIMENT.

*Take of nerve-ointment, three ounces; balſam of turpentine, one ounce. Mix them together.*

This is a warm invigorating topic, and may be uſed with good effect, to excite the nerves to action when too languid. It is applied to paralytic and numbed limbs, to reſtore a due ſenſe and feeling; and, by its penetrating quality, it is of good uſe in a ſciatica and the gout.

### PECTORAL LOHOCH.

*Take of ſpermaceti, white ſoap, each two drachms; whites of eggs, a ſufficient quantity. Mix them thoroughly together, and then add of freſh-drawn linſeed oil, one ounce and an half; ſyrup of marſh-mallows, three ounces. Mix the whole well together.*

This contains very great emollient and balſamic virtues; and, by the inciting and detergent property of the ſoap, becomes a powerful deobſtruent in infarctions of the breaſt; hence it is recommended in a difficulty of reſpiration, either from a dry huſky cough, or a tough thick phlegm; and likewiſe in impoſthumations and tubercles of the lungs.

### ALOETIC PILLS.

*Take ſuccotrine aloes, white ſoap, of each equal parts; thin honey, as much as is ſufficient. Make them into a maſs.*

The ſoap here is added purely to promote the diſſolution of the aloes in the ſtomach; for, pills made up of raiſins, and ſubſtances not eaſily diſſoluble, frequently paſs through the body entire: hence, by the purgative quality of the aloes, and detergent property of the ſoap, the glaires and viſcidities of the inteſtines are diſſolved and carried off; therefore the pills are ſtomachic, antifebrile, and excellent in nephritic and cholic pains.—Moreover, the aloes, being hepatic, forward the diſcharge of the bile, whilſt, by the concomitancy of the ſoap, it breaks the obſtructions of the liver, blends and aſſimilates the humours. Hence it appears how advantageous and eſſential it is to adapt and combine medicines judiciouſly.

### PURGING ECPHRATIC PILLS.

*Take ſuccotrine aloes, extract of black hellebore, ſcammony, of each two ounces; vitriolated tartar, three drachms; diſtilled oil of juniper, a drachm and a half; ſyrup of buckthorn, as much as is ſufficient to make the whole into a maſs.*

Theſe are an excellent hydragogue, particularly in cachectic and ſcorbutic habits abounding with dropſical humours. Three or four of theſe may be taken once a-day, or every other day, and continued according to the exigency of the complaint.

### MERCURIAL PILL.

*Take of purified quickſilver and honey, each half an ounce. Rub them together in a mortar, till the globules of mercury are perfectly extinguiſhed; then add, of Caſtile ſoap, two drachms; powdered liquorice, or crumb of bread, a ſufficient quantity to give the maſs a proper conſiſtence for pills.*

When ſtronger mercurial pills are wanted, the quantity of quickſilver may be doubled. The doſe of theſe pills is different, according to the intention with which they are given. As an alterant, two or three may be taken daily. To raiſe a ſalivation, four or five will be neceſſary. Equal parts of the above pill and powdered rhubarb made into a maſs, with a ſufficient quantity of ſimple ſyrup, will make a mercurial purging pill.

### MERCURIAL SUBLIMATE PILL.

*Diſſolve fifteen grains of the corroſive ſublimate of mercury in two drachms of the ſaturated ſolution of crude ſal ammoniac, and make it into a paſte, in a glaſs mortar, with a ſufficient quantity of the crumb of bread. This maſs muſt be formed into one hundred and twenty pills.*

This pill, which is the moſt agreeable form of exhibiting the ſublimate, has been found efficacious, not only in curing the venereal diſeaſe, but alſo in killing and expelling worms, after other powerful medicines had failed. For the venereal diſeaſe, four of theſe pills may be taken twice a-day, as an alterant three, and for worms two.

### PACIFIC PILLS.

*Take of galbanum, myrrh, white ſoap, of each two ounces; opium, one ounce; ſyrup of ſugar, as much as is ſufficient to make the whole into a maſs fit for pills.*

Theſe are admirable in aſſuaging hypochondriacal and hyſteric complaints, nephritic and uterine pains, cauſed either from obſtructions or ulcers in the kidneys or uterus.

### THE PECTORAL PILLS.

*Take of gum ammoniacum, an ounce and an half; myrrh, one ounce; balſam of ſulphur terebinthinated, one drachm; ſyrup of marſh-mallows, as much as will make the whole into a maſs.*

Theſe are healing and balſamic in a hæmopthiſis, infarctions, and ulcers of the lungs.

### STOMACHIC PILLS.

*Take of ſuccotrine aloes, one ounce and a half; gum ammoniac, myrrh, each half an ounce; vitriolated tartar, two drachms; diſtilled oil of mint, half a drachm; ſyrup of ſugar, a ſufficient quantity. Mix according to art.*

Theſe, by their cathartic, bitter, attenuating, and aromatic, qualities, incide and purge away ſloughy humours, which foul the coats of the ſtomach; alſo warm and fortify the fibres, whereby the gaſtric juice and digeſtion are promoted. They are moſt convenient in an advanced age, and full cachectic habits, which abound with cold viſcid humours. They may be taken five or ſix at a doſe.

### THE BALSAMIC POTION.

*Take of balſam copaiba, three drachms; diſtilled oil of juniper, thirty drops; the white of an egg. Work them well together, and mix in, of fennel-water, compound horſe-radiſh water, each three ounces; ſyrup of marſh-mallows, two ounces.*

This is vulnerary and diuretic; hence chiefly of uſe in wounds, ulcers, and weakneſſes of the kidneys and uterus.

### LITHONTRIPTIC POTION.

*Take of white ſoap (the outward part being pared off), one ounce; warm lime-water, one quart. Stir them together till the ſoap is perfectly diſſolved.*

This, by its penetrating and alkaline virtues, is intended for the gravel and ſtone, which it diſſolves and prevents by aſſimilating the humours, and by abſorbing thoſe acidities which form calculous concretions.

### COMPOUND SPIRIT OF LAVENDER.

*Take flowers of lavender, freſh gathered, a pound and an half; freſh flowers of roſemary, half a pound; freſh outward part of lemon-peel, three ounces; rectified ſpirit of wine, a gallon and a half. Diſtil in balneo mariæ to dryneſs. In the diſtilled ſpirit ſteep, for two days, of cloves, cubebs, and ſhavings of red ſaunders, each two ounces: then ſtrain out the ſpirit for uſe.*

## POWDER FOR EPILEPTIC AND CONVULSION FITS.

*Take flowers of zinc, muſk, and factitious cinnabar, of each equal parts; mix them together in a glaſs or marble mortar. The doſe is from three grains to ten and upwards, mixed in a little treacle or honey, every night and morning.*

The uſe of this powder, with dipping children in a tub of ſpring-water every morning, has very often relieved them, when every other remedy has proved abortive.

## PURGING POWDERS FOR WORMS.

*Take of ſcammony, calomel, and the beſt Turkey rhubarb, in powder, of each equal parts; double-refined ſugar, the weight of the whole; rub it all very well together in a marble mortar, and keep for uſe.*

The doſe for children is from ten grains to twenty-five, once or twice every week. This is preferable to any quack medicine whatever.

## A UNIVERSAL POWDER FOR CHILDREN's DISORDERS.

*Take of white magneſia, ſix drachms; cinnabar of antimony, two ſcruples; mix them into a fine powder for uſe.*

This powder will not only prevent the numerous diſorders children are liable to, but will alſo remove many, and all that ariſe from acidities in the ſtomach. This is preferable to all other remedies yet known, for children in cutting their teeth, ſickneſs at their ſtomachs, &c. &c. The doſe is from ten grains to half a drachm, more or leſs, twice a-day.

## POWDER TO PROMOTE DELIVERY.

*Take borax in fine powder, caſtor, cinnamon, and myrrh, of each three drachms; ſaffron and ſavin, of each one drachm and an half; mix them, and make a powder for uſe.*

A drachm of this powder facilitates the birth, and promotes the lochia and menſes.

## THE FAMOUS SYMPATHETIC POWDER.

*Take of green vitriol, eight ounces; of gum tragacanth, reduced to an impalpable powder, one ounce: mix theſe together, and let a ſmall quantity of the powder be ſprinkled on the wound, and it immediately ſtops the bleeding. The vitriol muſt be calcined to whiteneſs in the ſun, before it be mixed with the gum.*

The above powder is uſed by the miners at Goſſelaer in Germany, in all their wounds; and, I believe, was never known to fail. This powder, Monſ. Lemery and Sir Kenelm Digby tell us, has alſo the following wonderful property, that, if it be ſpread on a cloth dipped in the blood of a wound ſo as to incorporate with the blood, the wound would be cured, though the patient were miles off, and never ſaw the medicine. From this remarkable ſympathetic property it derived its name.

## POWDER FOR A SORE THROAT.

*Take one ounce and an half of purified ſal ammoniac, and half an ounce of purified nitre; mix them very well together in a mortar for uſe.*

About ſix or eight grains of this powder is to be frequently held in the mouth, and to be gently ſwallowed down the throat. This very often anſwers better than gargles. If neceſſary, loſe a little blood, and take a briſk purge before you uſe the powder.

## FOR VOMITINGS, BILIOUS DISORDERS, &c.

*Take mint-water, ſyrup of lemons, of each four ounces; ſalt of wormwood, two drachms. Mix them well together for uſe.*

In vomitings, hiccups, rheumatiſms, fevers, and all diſorders from a ſizineſs in the blood, no preparation can be more innocent nor more efficacious. Two or three table-ſpoonfuls are to be taken every four or five hours.

## DECOCTION FOR CATARRHS, COLDS, &c.

*Take of compound teſtaceous powder, one ounce; gum arabic in powder, half an ounce; water, two quarts. Boil it till one pint of the water is waſted: then add to the turbid decoction, of aromatic water, one ounce and an half; white ſugar, half an ounce, and mix the whole well together for uſe.*

This compoſition will be found immediately uſeful in deſtroying ſharp corroſive matter in the ſtomach, and abſorbing all acidities in the firſt paſſages. Half a pint of it in fevers, colds, or the like diſorders, may be taken three or four times every day, blood-warm.

## SWEATING DRAUGHT, FOR RECENT COLDS.

*Take of the ſpirit mindereus, four ounces; ſyrup of poppies, and ſimple cinnamon-water, of each one ounce; volatile ſalt of hartſhorn, half a ſcruple. Mix them together for two draughts, and take one of them when going into bed, and the remainder the ſecond evening after.*

In rheumatiſms, pains in the head, and other parts, the above ſweating draught will be found to anſwer every intent.

## FOR AN INVETERATE COLD OR COUGH.

*Take a large tea-cup full of linſeed, two-penny-worth of ſtick-liquorice, and a quarter of a pound of ſun-raiſins.—Put theſe into two quarts of ſoft water, and let it ſimmer over a ſlow fire till it is reduced to one; then add to it a quarter of a pound of brown ſugar-candy pounded, a table-ſpoonful of old rum, and a table-ſpoonful of the beſt white-wine vinegar or lemon-juice. The rum and vinegar are beſt to be added only to that quantity you are going immediately to take; for, if it is put into the whole, it is apt, in a little time, to grow flat. Drink half a pint at going to bed, and take a little when the cough is troubleſome.*

This receipt generally cures the worſt of colds in two or three days, and if taken in time may be ſaid to be almoſt an infallible remedy. It is a moſt ſovereign and balſamic cordial for the lungs, without the opening qualities which endanger freſh colds by going out. It has been known to cure colds that have been almoſt ſettled in conſumptions, in leſs than three weeks.

## FOR A PUTRID SORE THROAT.

*Take of the beſt Peruvian bark, in groſs powder, one ounce and a half; Virginian ſnake-root, three drachms; boil them together in three quarts of water to one quart; then ſtrain the liquor, and add two drachms of elixir of vitriol; take a large tea cup full of it every third hour. To every doſe you may add a ſmall quantity of brandy if you chuſe it.*

The ſteam of the following ingredients received into the throat through a funnel every hour will do a deal of ſervice:

*Take vinegar, one pint; honey, half a pound; myrrh, in powder, half an ounce: boil them well together, and it is fit for uſe.*

Bliſters applied to the throat, and behind the ears, are equally as beneficial in this diſeaſe, in caſe the pulſe and ſpirits are very low. If a vomiting continues, *Take four table-ſpoonfuls of lemon-juice, and put to it one drachm of ſalt of tartar; white ſugar, half an ounce; mint-water, three ounces: mix them very well together.* The doſe is a table-ſpoonful every hour.—This is the famous ſaline julep ſo much approved of by the faculty, as an antidote againſt vomiting and ſickneſs of the ſtomach. After the diſorder is ſubdued, the patient ſhould take a few purges of rhubarb, ſena, or the like. But, on the contrary, whilſt the putrid ulcers remain in the throat, and a violent looſeneſs ſhould come on, it muſt be checked, by taking two tea-ſpoonfuls of diaſcordium two or three times a day.

## ALE FOR THE INWARD PILES.

*Take half an ounce of black pitch, and boil it in a pint of good ale, till it comes to half a pint, then drink it off blood-warm.*

This, though a ſimple remedy, has proved very effectual in many ſtubborn caſes where other things of much greater expence have proved abortive.

## ALE FOR THE JAUNDICE.

*Take one quart of ale, and add to it two ounces of hemp-ſeed, and half an ounce of turmeric, in powder: boil them over the fire about a quarter of an hour, then ſtrain it for uſe.*

This may be ſweetened with coarſe ſugar. Half a pint of it at a doſe; to be taken every morning.

## VOMITING DRAUGHT.

*Take of ipecacuanha, in fine powder, twenty-five grains; alexeterial water, half an ounce; compound ſpirit of lavender, half a drachm; ſyrup of orange-peel, one drachm: mix them for uſe.*

## DRAUGHT FOR THE DROPSY.

*Take of peppermint-water, one ounce; ſimple cinnamon-water, half an ounce; ſpirituous cinnamon-water, two drachms; thebaic tincture, forty drops; lye of tartar, half a drachm; ſyrup of marſh-mallows, one drachm: mix them together for a draught.*

This is the medicine which cured a perſon labouring under an aſcites and tympany at the ſame time, where the pain was very ſevere, attended with great thirſt, and thick, high-coloured, urine, rendered in ſmall quantities. The ſtrong purges increaſed the diſtemper. Soap, lixivial ſalts, balſam of gilead, nitre, and the like, all proved abortive. This draught brought unexpected relief, by procuring reſt, and cauſing a copious diſcharge of water. By repeating the medicine for ſome time, every eight hours, and then only twice a-day, and afterwards uſing corroborants, or medicines that produce ſtrength of body, &c. the cure was perfectly completed.

## FOR CONSUMPTIONS.

*Take leaves of comfrey the greater, Solomon's ſeal, and pimpernel, each four handfuls; liquorice-root, two ounces: infuſe them cold for twelve days in two gallons of lime-water, and take off the clear liquor for uſe.*

This is very eaſily made, and is much better than if it were to be diſtilled. It is of excellent uſe in ſuch conſumptions as proceed from a ſharp thin blood; eſpecially in thoſe who have been injured by a certain bad diſeaſe, or have any hereditary remains of ſcrophulous or leprous humours. It muſt be drunk for about forty days together, to the quantity of a quart or two every day, if the ſtomach can bear ſo much. It will alſo be of the utmoſt ſervice to waſh foul ulcers with.

## DECOCTION FOR INWARD DECAY.

*Take ground-ivy, ſcabious, and colt's-foot, each two handfuls; hyſſop, one handful; elecampane-root, one ounce; liquorice, four ounces; agrimony, four handfuls: boil them together in nine quarts of barley-water till they come to about a gallon, then ſtrain it for uſe.*

This pectoral can be depended on in coughs and conſumptions of the lungs.

## FOR THE ASTHMA, AND SHORTNESS OF BREATH.

*Take of the milk of gum ammoniac, ſix ounces; ſyrup of ſquills, four ounces and a half: mix them together.*

This promotes expectoration in a very great degree, and relieves thoſe who are ſhort breathed; it is alſo juſtly eſteemed for its ſerviceable properties in aſthmatic caſes, by rarefying and thinning viſcid coheſions in the pulmonary veſſels. A ſpoonful is to be taken four or five times every day, and in particular every morning.

### INJECTIONS FOR ULCERS IN THE VAGINA AND WOMB.

*Take quickſilver, balſam copivæ, of each half an ounce: beat and work them together, till the quickſilver is extinguiſhed; then put to the maſs, the yelk of an egg: mix them very well together, gradually adding half a pint of roſe-water.*

As well for injections in ulcers in the vagina, occaſioned from the corroſiveneſs of a long continuance of the whites, it is equally as efficacious for a gonorrhœa, particularly if any ulcers be in the urethra. This ſimple preparation ſheaths the excoriated parts from the acrimony of the urine.

### ESSENCE FOR THE HEAD-ACH.

*Take of French brandy, or rectified ſpirit of wine, one quart, put it into a ſtrong bottle; and add one ounce of camphor cut ſmall; a quarter of an ounce of eſſence of lemon; and two ounces of the ſtrongeſt volatile ſpirit of ſal ammoniac. Stop the bottle quite cloſe, and ſhake it three or four times a-day for a week.*

The method of uſing it is to rub the hand with a little of it, and hold it hard upon the part affected until it is dry; if the pain is not quite relieved, repeat it till it is.

### COMPOUND TINCTURE OF SENA, COMMONLY CALLED DAFFY's ELIXIR.

*Take of the beſt ſena, two ounces; jalap, coriander ſeeds, and cream of tartar, of each one ounce; coarſe ſugar, three quarters of a pound; brandy, three pints; let them ſtand for ten or twelve days; then ſtrain off what is fine for uſe.*

This is an agreeable purge, and nothing can be more uſeful than to keep it ready-made for family uſe.

### GODFREY's CORDIAL.

*Take ſeven gallons of water, raſpings of ſaſſafras, and aniſeſeeds, of each four pounds; powder of carraway-ſeeds, eight ounces; opium, ſix ounces; coarſe ſugar, fifteen pounds: boil them all together, till one half of the liquor be evaporated, then ſtrain it through a coarſe bag or cloth, and add three gallons of ſpirit of wine rectified.*

### STOUGHTON's BITTERS.

*Take gentian-root, two ounces; dried orange-peel, two ounces and an half; cochineal, in powder, half a drachm; proof ſpirit, or brandy, two pounds; let them ſtand ten or twelve days, and decant off what is clear for uſe.*

### FRIAR's BALSAM, COMMONLY CALLED TURLINGTON's BALSAM OF LIFE.

*The true and beſt method of making it: Take gum benjamin, twelve ounces; gum ſtorax, eight ounces; balſam of Tolu (or Peru), four ounces; ſuccotrine aloes, two ounces; rectified ſpirit of wine, five quarts and a pint; let them ſtand to digeſt twelve or fourteen days, then decant for uſe.*

### PILLS FOR GIDDINESS, PALSY, HEAD-ACH, &c.

*Take native cinnabar, levigated, two drachms; caſtor, and ſalt of amber, of each one drachm; oil of marjoram, fifteen drops; balſam of Peru, one drachm; ſyrup of piony, a ſufficient quantity to make the maſs; and form nine pills out of every drachm of it.* The doſe is three of them to be taken three times a-day.

### PASTE FOR THE FISTULA, PILES, &c.

*Take a pound of elecampane-root, three pounds of fennel ſeeds, and one pound of black pepper; let theſe be made into a very fine powder, ſeparately: take two pounds of honey, and the ſame quantity of ſugar in powder: melt the honey and ſugar together over a gentle fire, ſcumming them continually, till they become as bright as amber: when they are cool, mix and knead them into your powders in the form of a paſte.*

The doſe is the ſize of a nutmeg, morning, noon, and night. This has been found a ſpecific for the fiſtula, piles, &c.

### FOR THE WHOOPING COUGH, BY THE ROYAL COLLEGE OF PHYSICIANS.

*Take flowers of benjamin, and ſtrained opium, of each two drachms; camphire, two ſcruples; eſſential oil of aniſeſeed, half a drachm; rectified ſpirit of wine, one quart: digeſt, and ſtrain off the elixir.*

This is original from Le Mort, and was publiſhed by Quincy, with four ounces of liquorice, and four of honey, which the college have omitted. It is anodyne and diaphoretic, and greatly contributes to allay tickling coughs, to open the breaſt, to give freedom of breathing, to cure an aſthma, but particularly the WHOOPING-COUGH IN CHILDREN. The doſe for children is from five drops to twenty; and, to grown perſons, from twenty to a hundred, at night and morning, in Malaga wine.

### Dr. SMITH's PRESCRIPTION FOR THE WHOOPING COUGH.

*Take of the muſk julep, ſix ounces; paregoric elixir, half an ounce; volatile tincture of valerian, one drachm;* mix them, and take two ſpoonfuls three or four times every day.

*Take milk of gum ammoniac, and of ſmall cinnamon-water, of each two ounces; tincture of caſtor, two drachms; ſyrup of balſam, half a drachm;* mix them, and adminiſter one ſpoonful preſently after.

Towards the decline of the diſeaſe, a decoction of the bark, in full doſes, may be preſcribed to advantage.

# INDEX TO THE MEDICAL PART.

*ABDOMEN*, or belly, the ſtructure of, with an explanation of all its parts, 72, &c.
*Agues*, or intermittent Fevers the cauſes, ſymptoms, regimen, and medical treatment, of, 119.
*Ale* for the inward piles, 25.
*Ale* for the jaundice, 253.
*Alexeterial Bolus*, 245.
*Anatomical Analyſis* of the human Frame, both male and female, 191, &c.
*Animal Magnetiſm*, or what founded, 244.
*Anodyne Balſam*, 245
*Anodyne Cliſter*, 248.
*Anodyne Liniment*, 29.
*Anthony's Fire St.*—See *Eryſipelas.*
*Anticholic Clyſter*, 24.
*Antidyſenteric Electury*, 247.
*Antihectic Decoction*, 247.
*Antipathy*, wonderful properties of, 243.
*Aperient Ale*, 246.
*Apoplexy*, its cauſe and cure, 172.
*Aromatic* or Spice Water, 245.
*Arteries*, their ſtructure and office, with their names and deſcription, 33, &c.
*Aſthma*, its different kinds, cauſes, ſymptoms, and cure, 171, &c.
*Balſamic Electuary*, 4.
*Bladder*, inflammation of the, 152.
*Bliſtering Plaiſter*, 28.
*Blood*, generation and circulation of, 103.
*Blood*, involuntary diſcharges of, to cure, 158.
*Blood*, ſpitting of, 59.
*Blood*, vomiting of, 160.
*Bolus* of Jalap with Mercury, 245.
*Bones*, or ſtructure of the human ſkeleton, 61.
*Bones*, broken, how to treat, 93.
*Brain*, inflammation of, its ſymptoms and cure, 139.
*Bruiſes*, how to treat, 18
*Burns*, to heal and cure, 188.
*Cartilages.*—See *Griſtles.*
*Cancer*, its extreme danger and beſt method to cure, 181.
*Child-birth*, or the proceſs of midwifery, 228.
*Cholera Morbus*, its danger and beſt mode of cure, 153.
*Cholic*, the different kinds and modes of cure, 150.
*Cold Bathing*, cautions previous to, 199.
*Colds and Coughs*, how to cure, 144, 145.
*Conception*, or Pregnancy, manner of, with the indiſpoſitions common thereto, 225.
*Conſumptions*, the different kinds, and methods of cure, 125.
*Convulſion Fits*, 19
*Cough, Whooping*, 16.
*Child in the Womb*, the progreſſive formation of its parts, 227.
*Cramp of the Stomach*, 177.
*Cephalic Electuary* 247.
*Cephalic Ale*, 246
*Daffy's Elixir*, 2
*Decoction* for catarrhs, colds, &c. 252.
*Decoction, Common* 247.
*Decoction* for a putrid ſore throat, 253.
*Decoction* for inward decays, 253.
*Defenſive Plaiſter*, 48.
*Diabetes*, deſcription of, and cure, 155.
*Diaphoretic Bolus*, 45.
*Diarrhœa*, or Looſeneſs, 15.
*Diſeaſes in general*, their prevention and cure, 112.
*Diſlocations*, 190.
*Draught, Saline*, 249.
*Draught* for the dropſy, 253.
*Drink* for conſumptions, 253.
*Drinking the Mineral Waters*, cautions previous thereto, 201.
*Dropſy*, how to cure, 163.
*Drowned Perſons*, recovering of, 196.
*Diuretic Decoction*, 24.
*Dyſentery*, or bloody Flux, 161.
*Eggs*, in the ovaries of a woman, contain the rudiments of the embryo, 227.
*Electuary* againſt the piles, 247.
*Electuary* againſt fluxes, 247.
*Elixir* for the whooping-cough, 254.
*Emetic*, or vomiting draught, 253.
*Emollient Cataplaſm*, 246.
*Emulſion Common*, and *Emulſion Arabic*, 248.
*Epilepſy*, or Falling Sickneſs, 175.
*Eryſipelas*, or St. Anthony's Fire, 138.
*Eſſence* for the head-ach, 254.
*Eye-Water*, 245.
*Eyes*, inflammation of, and cure, 140, &c.
*Fat*, its origin, quality, and office, 23.
*Fevers*, their nature, general tendency, and cure, 117.
*Fevers*, intermittent, 119.
*Fever*, acute or continual, 121.
*Fever*, ſlow or nervous, 128.
*Fever*, malignant, putrid, or ſpotted, 129.
*Fever*, the miliary, 131.
*Fever*, the remitting, 132.
*Fever*, ſcarlet, 137.
*Fever*, bilious, 138.
*Fibres*, their conſtruction and office, 21.
*Flatulencies*, or Wind, 178.
*Fleſh of the Human Body*, its diverſity, ſubſtance, &c. 20.
*Fluor Albus*, or Whites, 219.
*Fomentation*, aromatic, 249.
*Fomentation*, ſtrengthening, 249.
*Friar's Balſam*, 254
*Furor Uterinus*, cautions how to prevent, and cure of, 224.
*Gargle*, common, 249.
*Gargle*, emollient, 249.
*Generative Parts* in men and women, a minute deſcription of, 15, 84 to 91.
*Generation*, how performed, 227.
*Godfrey's Cordial*, 254.
*Gout*, how to alleviate, 165.
*Gravel* and *Stone*, 156.
*Green Sickneſs*, how to treat, 211.
*Griſtles*, or Cartilages, their nature and office, 22.
*Head*, deſcription of, 3.
*Heart*, its wonderful conſtruction, ſenſation, and office, 12.—A particular deſcription thereof, 100 to 102.
*Heart-burn*, to cure, 173.
*Hiccup*, how to prevent, 176.
*Hypochondriac Complaints*, 180.
*Hyſteric Complaints*, 179.
*Jaundice*, ſymptoms and cure, 162.
*Infants*, diſeaſes of, 234.
*Inflammations* and *Abſceſſes*, 185.
*Infuſion*, antiſcorbic, 249.
*Infuſion* of linſeed, 249.
*Injections*, balſamic, mercurial, 250.
*Injections* for ulcers in the vagina and womb, 254.
*Inteſtines*, deſcribed, 75.
*Inteſtines*, inflammation of the, 148.

*Itch*, how to prevent, or cure, 170.
*Juleps*, cordial, diaphoretic, diuretic, fœtid, ſaline, 250.
*Kidneys*, their ſituation, ſtructure, and office, 80.
*Kidneys*, inflammation of the, 151.
*King's Evil*, 169.
*Lavender*, compound ſpirit of, 251.
*Lenitive Electuary*, 247.
*Ligaments*, their conſtruction and uſe, 22.
*Liver*, its ſubſtance and office, 78.
*Liver*, inflammation of the, 152.
*Looſeneſs*.—See *Diarrhœa*.
*Lobelia*, an American Plant, uſed by the natives to cure the Venereal Diſeaſe, 213.
*Lungs*, their conſtruction and office, 102.
*Lungs*, inflammation of, 124.
*Man*, phyſical and aſtronomical deſcription of, 1.
*Membranes*, their conſtruction and office, 20.
*Meaſles*, ſymptoms of, and cure, 136.
*Menſtrual Diſcharge*, cautions concerning, 215.
*Mercurial Plaiſter*, 248.
*Mezereon Root*, a powerful aſſiſtant in venereal caſes, 213.
*Midwifery*, proceſs of, in natural and difficult labours, 228.
*Miners*, expoſed to injuries from unwholeſome air, and mineral evaporations, 114.
*Millepedes*, expreſſions of, 249.
*Muſcles*, their aſtoniſhing properties and curious conſtruction. A minute inveſtigation and deſcription of them, 40.
*Nerves*, a deſcription of them, with their properties, ſituation, and uſe, 37.
*Nervous Diſeaſes*, their cauſe, and cure, 174.
*Night-mare*, its cauſe and cure. Abſurd notion of this diſorder among the ancients, 177.
*Palſy*, 175.
*Pectoral Bolus*, 246.
*Penis*.—See *Generative Parts*.
*Piles*, bleeding and blind, 159.
*Plague* and *Fever Water*, 245.
*Plaiſter*, common, 248.
*Pleuriſy*, its cauſes and cure, 122.
*Poiſons*, how to repel, 183.
*Pulſes*, the explanation and doctrine of, 106.
*Purging*.—See *Cholera Morbus*.
*Quinſey*, or *Inflammatory Sore Throat*, 141.
*Reins* and *Kidneys*, deſcription of, 14
*Reins*, their ſituation and office, 80.
*Rheumatiſm*, how to cure, 167.
*Rhubarb Bolus*, with Calomel, 246.
*Ruptures*, in adults, 195.
*Ruptures*, in children, 235.
*Sarſaparilla*, a powerful ingredient in venereal caſes, 213.
*Scurvy*, cauſes of, ſymptoms, and cure, 168.
*Stomach*, its parts deſcribed, 10.
*Stomach*, inflammation of the, 147.
*Strains*, how to cure, 194.
*Stone* and *Gravel*, 156.
*Skin*, or Cuticle, its texture, ſubſtance, &c. 19.
*Skeleton*, or bones proper to the Human Body, their conſtruction, names, property, and office, 61.
*Sedentary Life*, the ill conſequence of it, 116.
*Small-pox*, its nature, ſymptoms, and mode of treatment, 133, &c.
*Small-pox*, inoculation of, by the moſt approved modern method, 135.
*Sore Throat*, inflammatory, ſymptoms of, danger, and neceſſary treatment, 141.
*Sore Throat*, putrid, malignant, or ulcerous, its contagious quality, ſymptoms, and beſt mode of cure, 142.
*Self-pollution*, its dreadful effects on either ſex, 222.
*Scrophula*, how to cure, 169.
*Sympathy*, particular deſcription of its effects, 213.
*Stomach Plaiſter*, 248.
*Strengthening Confection*, 246.
*Strengthening Electuary of the Bark*, 47.
*Suppurating Cataplaſm*, 216.
*Tendons*, their conſtruction, ſubſtance, and office, 23.
*Thorax*, or middle Ventricle, its parts deſcribed, 98.
*Venereal Diſeaſe*, bad conſequences of being neglected, 202. The virulent gonorrhœa, 203. Gleets, 207. Swelled teſticle, 208. Bubbes, 29. Chancres, 210. Stranguary and Phymoſis, 211. Confirmed lues, 212.
*Veins*, particular deſcription of, with their names, order, office, and curious conſtruction, 4.
*Ulcers*, how to treat, and cure, 189.
*Vomiting*, how to cure, or prevent, 54.
*Urine*, ſuppreſſion of, 156.
*Urine*, bloody, 161.
*Vulnerary Decoction*, 247.
*Weakneſſes*, contracted before marriage, 221.
*Whooping*, or *Chin Cough*, how to cure, 146.
*Women*, diſeaſes of, 215.
*Worm Plaiſter*, 248.
*Wounds*, how to heal, 186.

## DIRECTIONS TO THE BINDER.

### In the HERBAL.

Place the Head of Culpeper oppoſite to the Title, and Cuts of the Plants in alphabetical order, as near to the Deſcription of each Plant as poſſible; and let the Index to the Plants and Herbs be placed at the End of the Herbal.

### In the MEDICAL Part.

Place the Celeſtial Influx on Man, oppoſite the Title-page.

| | |
|---|---|
| Celeſtial Influx on Woman, to face | Page 19 |
| Veins of the Human Body, oppoſite | 32 |
| Arteries of ditto | 36 |
| Nerves of ditto | 40 |
| Muſcles, Plate I. | 59 |
| Muſcles, Plate II. | 60 |
| The Human Skeleton | 72 |
| The Organs of Generation, Male and Female, and Liver of a new-born Child | 97 |
| Plate of the Human heart | 102 |
| Child in the Womb, juſt before Delivery | 229 |
| Proceſs of Delivery | 230 |
| Poſition of the Embryos in a plural Conception | 233 |

*In the* WONDERS OF NATURE REVEALED, *or,* KEY TO PHYSIC AND OCCULT SCIENCE, *the Binder is to place this Continuation of the Work at the end of the Medical Part, as far as the Appendix, which is to be placed at the end of the Herbal, by which means the Whole will make Two elegant Volumes, entirely complete.*

FINIS.